

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.







Reserve  
A 241  
R 36B

# SWINE IMPROVEMENT

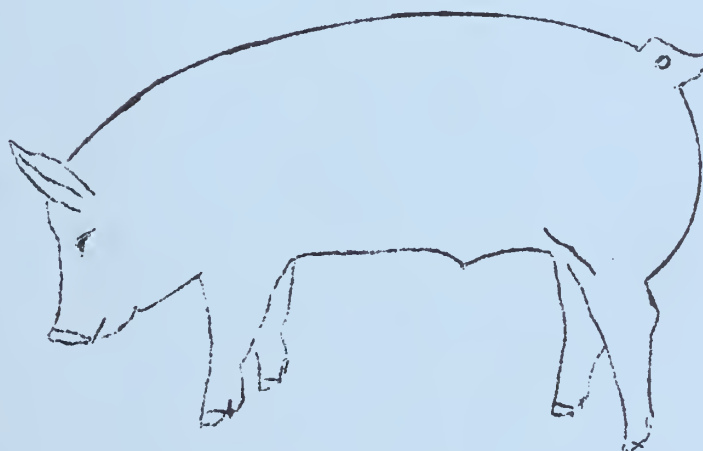
V

During the Period

1967 - 1968

By

Charles E. Shelby



Regional Swine Breeding Laboratory

Swine Research Branch, AHRD, ARS, USDA

225 Kildee Hall

Ames, Iowa

4-1-70

U.S. DEPT. OF AGRICULTURE  
NATIONAL LIBRARY OF MEDICINE







## FOREWORD

Swine Improvement is, hopefully, a reasonably complete Bibliography in one readily accessible source. All of the articles listed have a bearing on Swine Breeding Plans. Many early and unpublished studies, not readily available to current research workers are included, especially in Volumes I-III. Citations are limited to articles written in English or with English Summaries. An ABA citation is included whenever available.


Swine Improvement is an expansion and more carefully edited version of Bibliography of Swine Improvement. The material in Volume V is new and has not been published previously. Probably a few citations in the last year have been missed. Unfortunately, time was not available for extensive library search or for careful editing. ✓

Sources of the citations included: 1) Bibliographies of Technical Articles 2) Library Search at Iowa State and other Universities, 3) the Bibliography of Agriculture, 4) Animal Breeding Abstracts, 5) Bibliography of Reproduction, 6) Braude's Index of Current Research in Pigs, 7) Microfilm Abstracts, 8) Dissertation Abstracts, 9) Ward's Index of Scientific and Economic Studies of Particular Significance to the Swine Industry in the United Kingdom, 10) Experiment Station Annual Reports, 11) Biological Abstracts, 12) Experiment Station Records, 13) Agricultural Index, and various other sources.

In addition to swine genetics, the Bibliography now includes selected technical articles in reproductive physiology, meats, production, nutrition, physiology, zoology, and veterinary medicine. Popular articles by swine geneticists in this country were included, when known. Testing Station reports were not usually included, unless several years work was summarized.

In editing the Bibliography, a listing of all journals used with date of issue and volume numbers at ten year intervals evolved. A standard listing of abbreviations was also compiled. This was issued as A Guide to Swine Breeding Literature (1968). Several new journals not included in this listing are found in Volumes IV and V.

Due to the abolishment of this office, Swine Improvement will be discontinued with this volume.

  
Charles E. Shelby, Investigations Leader  
Regional Swine Breeding Investigations







- Aakvaag, A. 1967. Ovarian metabolism of pregnenolone in vitro (pig). (Abs.) Acta Endocrinol. (Copenhagen) 56 Sup. 119:72.
- Aberle, Elton D. 1967. Physical and biochemical properties of porcine muscle as affected by some adrenal hormones and post-mortem glycolytic parameters. Ph.D. Thesis, Mich. State U. Libr., East Lansing. Diss. Abs. 28(3):931B.
- Adamiker, D., and Glawischnig, E. 1967. Electron microscopical investigations on the mammary glands of swine. II. Eng. Sum. (Ger.) Wien. Tierarztl. Mon.Schr. 54(9):575-583.
- Addis, Paul Bradley, 1967. Acclimation during growth in relation to the biochemical reactions and post-mortem properties of porcine muscle. Ph.D. Thesis, Purdue U. Libr., Lafayette. Diss. Abs. 28(6):2740B.
- Addis, P. B., Johnson, H. R., Heidenreich, C. J., Jones, H. W., and Judge, M. D. 1967. Effect of humidity level in a warm growing environment on porcine carcass composition and quality. J. Anim. Sci. 26:705-708. (ABA 36:534).
- Addis, P. B., Johnson, H. R., Thomas, N. W., and Judge, M. D. 1967. Effect of temperature acclimation on porcine physiological responses to heat stress and associated properties of muscle. J. Anim. Sci. 26:462-469.
- Addis, P. B., Johnson, H. R., Heidenreich, C. J., Jones, H. W., and Judge, M. D. 1967. Effect of humidity level in a warm growing environment on porcine carcass composition and quality. J. Anim. Sci. 26:705-708.
- Ahlschwede, William Thomas. 1967. The effects of weather at the time of mating on litter size in swine. M.S. Thesis, N. C. State U. Libr., Raleigh.
- Ahmad, A. 1967. Metabolism of gossypol in *Sus scrofa*, a monogastric mammal. Diss. Abs. 28(2):525B.
- Ahmad, N., and Gower, D. B. 1967. Kinetic studies of the formation of  $5\alpha$ -androst-16-en-3 $\alpha$  eol and other  $\Delta 16$ -steroids from progesterone in boar testis tissue. (Abs.) Acta Endocrinol. (Copenhagen) 56, Suppl. 119:73.
- Akins, E. L., Morrisette, M. C., and McDonald, L. E. 1967. Pituitary FSH-LH and luteal progesterone in cycling swine. (Abs.) Fed. Proc. 26:536.
- Albrecht, John Ernest. 1967. Electrocardiographic measurement of heart action as effected by gossypol intoxicification of swine. M.S. Thesis, N. C. State U. Libr., Raleigh.



1967

- Albrecht, J. E., Clawson, A. J., Ulberg, L. C., Barrick, E. R., and Smith, F. H. 1967. Effects of gossypol on electrocardiograms of swine. (Abs.) J. Anim. Sci. 26:213.
- Alcasid, A. 1967. Swine breeding. Phil. Farm. Gard. 4(5):24-25, 30.
- Alderson, E. 1967. The new grading system. Hog Prod. 3(4):8-9.
- Allen, E., Bray, R. W., and Cassens, R. G. 1967. Histochemical observations of porcine muscle as related to lipid accumulation. J. Food Sci. 32(1):20-25.
- Allen, E., Bray, R. W., and Cassens, R. G. 1967. Changes in fatty acid composition of porcine muscle lipid associated with sex and weight. J. Food Sci. 32(1):26-29.
- Allen, E., Cassens, R. G., and Bray, R. W. 1967. Comparative lipid composition of three porcine muscles. J. Anim. Sci. 26(1):36-40.
- Allen, E., Cassens, R. G., and Bray, R. W. 1967. A typical intrafascicular accumulation of fat in porcine striated muscle. J. Food Sci. 32(2):146-147.
- Almedzev, KH.S. 1967. White muscle disease of piglets. Eng. Sum. (Ger.) Mon.H. Vet.Med. 22(14):591-594.
- Alsmeyer, W. L. 1967. Influence of salts of ethylenediaminetetraacetic acid on the tryptophan load test in pyridoxine-deficient swine. Diss. Abs. 27(11):3730B.
- Alterauge, W., Poggel, H., and Hollinde, H. 1967. Observations on pork musculature, resembling in appearance the flesh of fish, (white muscle) in pigs at the Dortmund slaughterhouse. Eng. Sum. (Ger.) Fleischwirtschaft 47(9):974-977.
- Anand, A. S. 1967. The effect of boar spermatozoa senility on the DNA loss by the sperm cell. Ph.D. Thesis, U. Wis. Libr., Madison.
- Anand, A. S., and First, N. L. 1967. Effect of freezing on the DNA content of boar spermatozoa. (Abs.) J. Anim. Sci. 26:940-941.
- Anand, A. S., Hoekstra, W. G., and First, N. L. 1967. Effect of aging of boar spermatozoa on cellular loss of DNA. J. Anim. Sci. 26:171-173. (ABA 35:2772).
- Anderson, G. H., and Bowland, J. P. 1967. Lysine and fat supplementation of weanling pig diets. Canad. J. Anim. Sci. 47(1):47-55.
- Anderson, J. W., and Lhotka, J. F. 1967. Polysaccharide localizations in giant cells in the developing pig liver. (Abs.) Anat. Rec. 157:395.



1967

- Anderson, L. L., and Melampy, R. M. 1967. Hypophysial and uterine influences on pig luteal functions. Reproduction in the Female Mammal. Butterworths, London. pp. 285-316. (ABA 36:4200).
- Anderson, L. L., Dyck, G. W., Mori, H., Henricks, D. M., and Melampy, R. M. 1967. Ovarian function in pigs following hypophysial stalk transection or hypophysectomy. *Amer. J. Physiol.* 212(5):1188-1194.
- Andreae, U. 1967. The influence of regular running exercise on fattening results and carcass characters of pigs. *Eng. Sum. (Ger.) Zucht.K.* 39:117-125. (ABA 36:536).
- Andreev, A. 1967. The relation between the weight of the fillet and quantity of meat from pigs fattened for bacon. *Zhivotn. Nauki, (Sofia)* 4, 75.
- Andresen, E. 1967. Irregular transmission of a blood group complex in one family of pigs following irradiation. *Vox. Sang.* 12:25-31.
- Andresen, E. 1967. Linkage and epistasis exemplified by genetic systems in pigs. *Proc. 10th Europ. Anim. Blood Group Conf. Biochem. Polymorph., Paris, 1966*:439-443. (ABA 36:575).
- Anon. 1967. Rare disease found in hogs. *Agr. Res.* 15(8):15.
- Anon. 1967. Sow milk analysis... may lead to better hogs. *Agr. Res.* 16(5):13.
- Anon. 1967. Pale exudative pig muscle. *An Foras Taluntais (Dublin) Anim. Prod. Div., Res. Rpt.* 1967.
- Anon. 1967. Effect of breed and method of slaughter on the colour of pre-rigor pig muscles. *An Foras Taluntais (Dublin). Anim. Prod. Div. Res. Rpt.* 1967.
- Anon. 1967. Oestrus control in gilts. *An Foras Taluntais (Dublin) Anim. Prod. Div., Res. Rpt.* 1967.
- Anon. 1967. A selection index for performance-tested boars. *An Foras Taluntais (Dublin) Anim. Prod. Div. Res. Rpt.* 1967.
- Anon. 1967. A study of factors affecting preweaning traits in inbred and crossbred pigs. *An Foras Taluntis (Dublin) Anim. Prod. Div. Res. Rpt.* 1967.
- Anon. 1967. Bibliography on mechanism of action of IUDs. (121 references; 1955-1967; man, monkeys, rabbits, hamsters, rats, mice, guinea pigs, pigs, cattle, buffaloes, goats, sheep, domestic fowl). *Bibliog. Reprod.* 10:297-302; 407-409.



1967

- Anon. 1967. Reproduction in the Female Mammal. Proc. of the 13th Easter Sch. in Agr. Sci. U. of Nottingham. Butterworth, London. (ABA 36:4200)
- Anon. 1967. Vaginal biopsy technique as an aid to the early diagnosis of pregnancy in the sow. West of Scotland Agr. Col. Auchincruive Ayr, Scotland.
- Anon. 1967. Oestrus synchronisation of stall-housed sows with Methallibure. Annu. Rpt. Sch. of Agr. U. of Newcastle-upon-Tyne, Newcastle-upon-Tyne.
- Anon. 1967. Indirect measures of carcass evaluation. Annu. Rpt. Sch. of Agr. U. of Newcastle-upon-Tyne, Newcastle-upon-Tyne.
- Anon. 1967. Genetic control herd of Large Whites. Annu. Rpt. Sch. of Agr. U. of Newcastle-upon-Tyne, Newcastle-upon-Tyne.
- Anon. 1967. Pig breeding research unit. Annu. Rpt. Sch. of Agr. U. of Newcastle-upon-Tyne, Newcastle-upon-Tyne.
- Anon. 1967. Co-ordinated Large White pig breeding project. Annu. Rpt. Sch. of Agr. U. Newcastle-upon-Tyne, Newcastle-upon-Tyne.
- Anon. 1967. Selection for lean meat content and food conversion. West of Scotland Agr. Col., Auchincruive Ayr, Scotland.
- Anon. 1967. Ulcerative granuloma in pigs; hygiene a main factor in prevention. Agr. Gaz. New S. Wales 78(6):351-353.
- Anon. 1967. Hybrid pigs. Agr. North Irel. 42(1):9-10.
- Anon. 1967. Proteins of pig muscle. An Foras Taluntais (Dublin) Anim. Prod. Div., Res. Rpt. 1967.
- Anon. 1967. pH measurements in commercially-slaughtered pigs. An Foras Taluntais (Dublin) Anim. Prod. Div., Res. Rpt. 1967.
- Anon. 1967. Detection of taint from the carcasses of entire male pigs. Rowett Res. Inst. Annu. Rpt. of Studies in Anim. Nutr. and Allied Sci. Vol. 23. Bucksburn, Aberdeen.
- Anon. 1967. Leg weakness. Rowett Res. Inst. Annu. Rpt. of Studies in Anim. Nutr. and Allied Sci., Vol. 23, Bucksburn, Aberdeen.
- Anon. 1967. Effect of nutrition on the incidence of taint in entire male pigs. Rowett Res. Inst. Annu. Rpt. of Studies in Anim. Nutr. and Allied Sci. Vol. 23. Bucksburn, Aberdeen.



1967

- Anon. 1967. Effects of environmental temperature on pigs. Rowett Res. Inst. Annu. Rpt. of Studies in Anim. Nutr. and Allied Sci. Vol. 23. Bucksburn, Aberdeen.
- Anon. 1967. Foetal growth and development. Rowett Res. Inst. Annu. Rpt. of Studies in Anim. Nutr. and Allied Sci. Vol. 23. Bucksburn, Aberdeen.
- Anon. 1967. The maturation of skeletal muscle in pigs. Rowett Res. Inst. Annu. Rpt. of Studies in Anim. Nutr. and Allied Sciences. Vol. 23. Bucksburn, Aberdeen.
- Anon. 1967. Metabolic studies on boar spermatozoa. Rpt. U. of Reading Natl. Inst. for Res. in Dairying. Shinfield, Reading, Berks.
- Anon. 1967. Nitrogen metabolism and body composition in growing pigs. Rpt. U. of Reading Natl. Inst. for Res. in Dairying. Shinfield, Reading, Berks.
- Anon. 1967. 55th Report on comparative trials with pigs from government approved breeding centers. Eng. Sum. (Swe.) Arb. Landokon. Forsogslab, Denmark. 360, 147p.
- Anon. 1967. Index of pig research supported by PIDA. PIDA London. Mimeo. (ABA 35:1566).
- Anon. 1967. Pig progeny testing and sow testing during the recording year 1st Oct. 1965 to 30th Sept. 1966. 44th report. Eng. Sum. (Swe.) Meddn. K. Lantbr. Styr. Ser. B. 72. (ABA 35:3829).
- Anon. 1967. Symposium on temperature regulation in swine, February 17-18, 1966. Eng. Sum. (Ger.) Mon.H. Vet.Med. 22(18):721-756.
- Anon. 1967. Selection for higher carcass lean and better feed conversion efficiency. Res. in the Dept. of Agr. 1966-1967. U. Col. of North Wales, Bangor.
- Anon. 1967. Factors influencing the acquisition of passive immunity in pigs. Res. in the Dept. of Agr. 1966-1967. U. Col. of North Wales, Bangor.
- Anon. 1967. The persistency of passively acquired antibody. Res. in the Dept. of Agr. 1966-1967. U. Col. of North Wales, Bangor.
- Anon. 1967. Genetically controlled iso-antigenic variants of pig serum proteins. Res. in the Dept. of Agr. 1966-1967. U. Col. of North Wales, Bangor.
- Anon. 1967. Current developments in A.I. for pigs. Vet. Rec. 81(5): 125-126.



1967

- Aparicio Macarro, J. B. 1967. Estimation of back fat thickness on live pigs by ultrasonics. Eng. Sum. (Sp.) Arch. Zootech. 16(62):1-26.
- Arcelay, C. L., and Carlo, I. 1967. Carcass quality and efficiency of feed conversion of swine slaughtered at different weights. J. Agr. U. Puerto Rico 51(4):286-292.
- Arimura, A., Schally, A. V., Saito, T., Muller, E. E., and Bowers, C. Y. 1967. Induction of ovulation in rats by highly purified pig LH-releasing factor. Endocrinol. 80:515-520.
- Arimura, A., Saito, T., Muller, E. E., Bowers, C. Y., Sawano, S., Schally, A. V. 1967. Absence of prolactin-release inhibiting activity in highly purified (pig) LH-releasing factor (rats). Endocrinol. 80:972-974.
- Ashdown, R. R., and Marrable, A. W. 1967. Adherence and fusion between the extremities of adjacent embryonic sacs in the pig. J. Anat. 101(2):269-275.
- Ashton, G. C., Gilmour, D. G., Kiddy, C. A., and Kristjansson, F. K. 1967. Proposals on nomenclature of protein polymorphisms in farm livestock. Genet. 56(3):353-362.
- Aumaitre, A., and Salmon-Legagneur, E. 1967. Factors affecting the growth rate of suckling piglets. Acta U. Agr. Fac. Vet. Brno. 36:369-378. (ABA 36:2807).
- Babatunde, G. M. 1967. Nutritional significance of the essential fatty acids in swine diets. Diss. Abs. Sect. B. 28(4):1302B.
- Babatunde, G. M., Pond, W. G., Krook, L., Van Vleck, L. D., Walker, E. F. Jr. and Chapman, P. 1967. Effects of dietary safflower oil or hydrogenated coconut oil on growth rate and on some blood and tissue components of pigs fed a fat-free diet. J. Nutr. 92(3):293-302.
- Babatunde, G. M., Pond, W. G., VanVleck, L. D., Kroening, G. H., and Reid, J. T. 1967. Effect of plane of nutrition, sex and bodyweight on the chemical composition of Yorkshire pigs. J. Anim. Sci. 26: 718-726.
- Babatunde, G. M., Pond, W. G., Walker, E. F. Jr., Chapman, P. and Banis, R. J. 1967. Studies on essential fatty acid deficiency in swine. II. Short term of effects of feeding various combinations of fat on blood parameters and performance of young pigs. Cornell U. Swine Div. Mimeo Ser. No. 67-1.
- Babatunde, G. M., Pond, W. G., Walker, E. F. Jr., Chapman, P., and Banis, R. 1967. Dietary fats and hematological changes in pigs. (Abs.) J. Anim. Sci. 26:903-904.



1967

- Baglioni, T., Locatelli, A., and Novazzi, G. 1967. Hemoglobin, iron and transferrin in the serum of newborn pigs; observations following the treatment of pregnant sow with an iron compound. Eng. Sum. (It.) Clin. Vet. 89(11):346-352.
- Bailey, M. E. and Zobrisky, S. E. 1967. Changes in proteins during growth and development in animals. Proc. Conf. Body Composition NAS-NRC, Washington.
- Baker, D. H., Jordan, C. E., Waitt, W. P., and Gouwens, D. W. 1967. Anabolic activity of orally-administered diethylstilbestrol plus methyltestosterone for swine. (Abs.) J. Anim. Sci. 26:904.
- Baker, D. H., Jordan, C. E., Waitt, W. P., and Gouwens, D. W. 1967. Effect of a combination of diethylstilbestrol and methyltestosterone, sex and dietary protein level on performance and carcass characteristics of finishing swine. J. Anim. Sci. 26:1059-1066.
- Baker, L. N. 1967. A new Allele, Hp<sup>4</sup>, in the Hemopexin system in pigs. Vox Sang. 12:397-400.
- Baker, R. D., Dziuk, P. J., and Norton, H. W. 1967. Polar body and pronucleus formation in the pig egg. J. Expt. Zool. 164:491-497. (ABA 35:3854).
- Balbierz, H., Barnecki, W., Kaczmarek, A., and Nowosad, R. 1967. Antigenic systems of erythrocytes and blood protein fractions in Zlotniki breed of pig. Eng. Sum. (Pol.) Zesz. Nauk. Wyzzsz. Skoly. Roln Wroclawiu. Weter. 21(72):123-131.
- Baldwin, B. A., and Ingram, D. L. 1967. The effect of heating and cooling the hypothalamus on behavioural thermoregulation in the pig. J. Physiol. 19(2):375-392.
- Baldwin, B. A., and Ingram, D. L. 1967. Behavioural thermoregulation in pigs. Physiol. and Behav. 2:15-21.
- Banis, R. J., Walker, E. F. Jr., Chapman, P., Pond, W. G., and Van Vleck, L. D. 1967. Growth rate and some blood parameters in miniature vs. conventional swine. Cornell U. Swine Div. Mimeo Ser. No. 67-6.
- Banis, R. J., Walker, E. F. Jr., Chapman, P., and Pond, W. G. 1967. Weight gain and some blood parameters in miniature versus conventional pigs. (Abs.) J. Anim. Sci. 26:873.
- Barbe, C. D., and Henrickson, R. L. 1967. Bacteriology of rapid cured ham. Food Technol. 21(9):103.
- Barber, R. S., Braude, R., and Mitchel, K. G. 1967. Effect on performance of growing pigs of reducing trough space from 15 to 10 inches per pig. (Abs.) Anim. Prod. 9:274.



1967

- Barker, C. A. V. 1967. Control of estrus in pigs fed I.C.I. compound 33828. *Canad. Vet. J.* 8(2):39-46. (ABA 35:3855).
- Barnes, R. H., Moore, A. U., Reid, I. M., and Pond, W. G. 1967. Learning behavior following nutritional deprivations in early life. *J. Amer. Diet. Assoc.* 51:34.
- Baulieu, E. E., Fabre-Jung, I., and Huis In't Veld, L. G. 1967. Dehydroepiandrosterone sulfate; a secretory product of the boar testis. *Endocrinol.* 81(1):34-38.
- Baulieu, E. E., Fabre-Jung, I., Huis In't Veld, L. G. 1967. Dehydroepiandrosterone sulfate; A product secreted by the boar testis. *Gen. Compar. Endocrinol.* 9(3):432.
- Bazer, F. W., Clawson, A. J., and Ulberg, L. C. 1967. Uterine capacity following superinduction of embryos. (Abs.) *J. Anim. Sci.* 26:941.
- Bazer, F. W., Clawson, A. J., Robison, O. W., Ulberg, L. C., and Vincent, C. K. 1967. An explanation for embryo death in gilts on high energy. (Abs.) *J. Anim. Sci.* 26:227.
- Becker, D. E., Jensen, A. H., Harmon, B. G., Dziuk, P. J., and Norton, H. W. 1967. Current swine research in animal science. Rpt. III. Swine Growers Day, March 21, 1967, Urbana. AS-641E.
- Becze, J. B., Scheven, J. B., and Smidt, D. 1967. Prenatal changes in the body measurements and their relationship to the postnatal body proportions in miniature swine. *Eng. Sum. (Ger.) Deut. Tierarztl. Wchn.Schr.* 74(3):62-64,69-73.
- Begovic, J., and Hesselholt, M. 1967. Serum protein polymorphism in Yugoslav and Dutch pig breeds. *Eng. Sum. (Dan.) Arsberet, Inst. Sterilitetsforsk. K. Vet.-og Landbohojsk.* 1967:75-90. (ABA 36:1698).
- Beilharz, R. G., and Cox, D. F. 1967. Social dominance in swine. *Anim. Behav.* 15(1):117-122.
- Beilharz, R. G., and Cox, D. F. 1967. Genetic analysis of open field behaviour in swine. *J. Anim. Sci.* 26:988-990. (ABA 36:576).
- Belic, J., Ognjanovic, A., and Gajic, Z. 1967. The acclimatisation of Large Whites in the north of Banat. *Eng. Sum. (Ser.) Arh. Poljopr. Nauke*, 20(69):79-96. (ABA 36:1643).
- Bell, M. C., Sneed, N. N., and Hall, R. F. 1967. Airborne radionuclides and animals. *Proc. Symp. Agr. & Qual. Envir. AAAS, Washington.* Dec. 26-31, 1966.
- Belt, W. D., and Cavazos, L. F. 1967. Fine structure of the interstitial cells of Leydig in the boar. *Anat. Rec.* 158:333-350.



1967

- Benson, R. W., Pickett, B. W., Komarek, R. J., and Lucas, J. J. 1967. Effect of incubation and cold shock on motility of boar spermatozoa and their relationship to lipid content. J. Anim. Sci. 26:1073-1081. (ABA 36:617).
- Bereskin, B., and Shelby, C. E. 1967. Monte Carlo study. 30th Annu. Rpt. and Rec. Proc. Conf. Collab. Reg. Swine Breed. Lab., Stillwater, Okla. p. 162.
- Bereskin, B., and Shelby, C. E. 1967. Laboratory mouse experiments. 30th Annu. Rpt. and Rec. Proc. Conf. Collab., Reg. Swine Breed. Lab., Stillwater, Okla. pp. 165.
- Bereskin, B., Shelby, C. E., and Hazel, L. N. 1967. Monte Carlo swine inbreeding selection studies. (Abs.) J. Anim. Sci. 26:1466. (ABA 36:2186).
- Bernard, C. 1967. Genetic aspects of feed efficiency in livestock. Proc. 16th Annu. Meet. Canad. Soc. of Anim. Prod. U. Manitoba, June 27-30th.
- Berry, B. W., and Kroening, G. H. 1967. Effect of ration and sample location on porcine muscle fiber diameter and tenderness. (Abs.) J. Anim. Sci. 26:892-893.
- Berry, R. K. 1967. An investigation of total and <sup>35</sup>S-labeled mucopolysaccharides in intestinal wall and kidney of cattle, sheep and swine. Ph.D. Thesis, U. Tenn., Knoxville.
- Bertschinger, H. 1967. Synchronisation of the sex cycle in the pig. Eng. Sum. (Ger.) Schweiz. Arch. Tierheilk 109(11):588-593. (ABA 36:1718).
- Bhattacharya, S., Gupta, S., and Moulick, S. K. 1967. Studies on length of gestation period in Large White pigs. Indian J. Vet. Sci. 37:133-137. (ABA 37:1696).
- Bickhardt, K., Ueberschar, S., and Giese, W. 1967. Protracted atrophy of the posterior femoral musculature in pigs. Eng. Sum. (Ger.) Deut. Tierarztl. Wchn.Schr. 74(13):324, 327-333.
- Bicknell, E. J., Brooks, R. A., Osburn, J. A., and Whitehair, C. K. 1967. Extra hepatic biliary obstruction and gastric ulcers in pigs. Amer. J. Vet. Res. 28(125):943-950.
- Bielanska-Osuchowska, Z. 1967. Studies on the development of the gonads in embryos of the domestic pig (*Sus scrofa*). 3. Attempt at defining the nature of cells displaying PAS-positive granules in the differentiating ovary anlage. Folio Histochem. Cytochem. (Krakow) 5:213-229.



1967

- Binns, R. M. 1967. Bone marrow and lymphoid cell injection of the pig foetus resulting in transplantation tolerance or immunity, and immunoglobulin production. *Nature* 214(5084):179-181.
- Binns, R. M., Harrison, F. A., Heap, R. B. 1967. Transplantation of the ovary in the pig and in the pregnant sheep. (Abs.) *Acta Endocrinol. Copenhagen* 56. Sup. 119:193.
- Biswas, Dilip Kumar. 1967. Intrapopulation selection versus recurrent reciprocal selection in swine. Ph.D. Thesis, U. Wis. Libr., Madison. Also Diss. Abs. 28(11):4428B.
- Bjersing, L. 1967. Histochemical demonstrahydroxysteroid dehydrogenase activities in porcine ovary. *Histochem.* 10(4):295-304.
- Bjersing, L. 1967. Ultrastructure of follicles and isolated follicular granulosa cells of porcine ovary. *Z. Zellforsch. Mikros. Anat.* 82:173-186.
- Bjersing, L. 1967. Ultrastructure of granulosa lutein cells in porcine corpus luteum. With special reference to endoplasmic reticulum and steroid hormone synthesis. *Z. Zellforsch. Mikros. Anat.* 82:187-211.
- Bjersing, L. 1967. Morphology and endocrine function of granulosa cells in ovarian follicles and corpora lutea (sows). *Acta Endocrinol (Copenhagen)* 56, Sup. 125, 23 p.
- Bjersing, L., and Carstensen, H. 1967. Biosynthesis of steroids by granulosa cells of the porcine ovary in vitro. *J. Reprod. & Fertil.* 14(1):101-111.
- Bjorkman, N., and Hellman, B. 1967. Morphological characteristics of the secretory granules in pancreatic beta-cells from species with identical primary structures of insulin. *Experientia* 23(9):721-722.
- Black, J. L. 1967. Gametogenesis and ovarian development in the pig as determined by histologic, cytologic and radioisotopic techniques. Ph.D. Thesis, U. Tennessee, Knoxville.
- Boaz, T. G., and Fowler, V. R. 1967. Efficiency of production of the fat-free body mass in pigs. *PIDA Index Pig Res.* Jan. pp. 60.
- Bochno, R. 1967. The suitability of the specific gravity of the basic cuts for evaluating the meat or fat content of the carcass in meat pigs. *Eng. Sum. (Pol.) Zesz. Nauk. Wyzzsz. Szkol. Roln. Olsztyn.* 23:803-834. (ABA 37:1625).
- Bochno, R., and Znaniecki, P. 1967. The suitability of the specific gravity of cuts obtained by the industrial (culinary) method of dissection for evaluating the meat or fat content of the carcass in meat pigs. *Eng. Sum. (Pol.) Zesz. Nauk. Wyzzsz. Szkoły Roln. Olsztyn.* 23:791-802. (ABA 37:1626).



1967

- Bochno, R., Znaniecki, P., and Rak, B. 1967. Backfat thickness as an indicator of the fat or meat content of the basic cuts in the carcasses of meat pigs. Eng. Sum. (Pol.) Zesz. Nauk. Wyzsz. Szkoly. Roln. Olsztyn. 23(4):859-873. (ABA 37:1627).
- Bockenhoff, E., Fewson, D., and Bischoff, T. 1967. The economic importance of various production characters in the pig and their effect on breeding. 1. Economic importance of production characters. Eng. Sum. (Ger.) Zuchtungskunde 39(4):270-282. (ABA 36:1647).
- Boenker, D. E. 1967. The problem of gastric ulcers in swine. Feedstuffs 7/1/67. pp. 41-42 and 46-49.
- Bojsen-Moller, F. 1967. Topography and development of anterior nasal glands in the pigs. J. Anat. 101(2):321-331.
- Boling, James A. 1967. Physiological and biochemical observations related to dietary energy changes in cattle and swine. Ph.D. Thesis, U. Wis. Libr., Madison.
- Boling, J. A., Grummer, R. H., and Hauser, E. R. 1967. A comparison of diet dilution with ad libitum and restricted feeding in growing swine. (Abs.) J. Anim. Sci. 26:1474.
- Bond, T. E., Kelly, C. F., and Heitman, H. 1967. Physiological response of swine to cycling environmental conditions. Anim. Prod. 9(4): 453-462.
- Borchert, Larry L. 1967. Temperature induced post-mortem changes in striated muscles. Ph.D. Thesis, U. Wis. Libr., Madison.
- Boursnell, J. C. 1967. Boar seminal haemagglutinin. 2. Combination with red cells and spermatozoa. J. Reprod. & Fertil. 13:297-314.
- Bowers, J. A. R. 1967. Browning and associated properties of porcine muscle. Diss. Abs. 28(5):1783B.
- Bowers, J. R., Harrison, D. L., and Kropf, D. H. 1967. Browning and associated properties of pork muscle. (Abs.) Food Trade Rev. 37(7):42.
- Bowland, J. P. 1967. Frequency of feeding market pigs. Rpt. Alberta 46th Annu. Feeders' Day, June 3, 1967. U. Alberta, Edmonton, Alberta, Canad. pp. 24-25.
- Bowland, J. P. 1967. Energy-protein relationships in rations for market pigs. Rpt. Alberta 46th Annu. Feeders' Day, June 3, 1967. U. Alberta, Edmonton, Alberta, Canad. pp. 26-28.
- Bowland, J. P., and Schuld, F. W. 1967. Rapeseed meal as a protein source for swine reproduction. Rpt. Alberta 46th Annu. Feeders' Day, June 3, 1967 U. Alberta, Edmonton, Alberta, Canad. p. 28.



1967

- Bowland, J. P. 1967. Energetic efficiency of the sow. J. Anim. Sci. 26:533-539.
- Bowles, A. T. C., and Trathen, J. 1967. Progeny and performance testing of pure and crossbred Pietrain pigs. PIDA Index Pig Res. Jan. pp. 96-97.
- Bowman, G. H. 1967. Location of sites for backfat measurements. Proc. 16th Annu. Meet. Canad. Soc. of Anim. Prod. U. Manitoba, June 27-30th.
- Bratanov, K., Balchev, M., Danov, D., and Pavlov, A. 1967. Allergic relationships between fetus and dam during pregnancy in cows, ewes, and sows. (Abs.) Internatl. Symp. on Immunology of Spermatozoa and Fertilization. 27-29 Sept. 1967. Center for Agr. Sci. Tech. Inf. Dragan Tsankov 6, Sofia, Bulgaria. pp. 43-44.
- Bratanov, K., Balchev, M., Danov, D., and Pavlov, A. 1967. Allergic reaction during pregnancy of farm animals. II. Studies on pregnant ewes and sows. Vet. Med. Nauki, Sof. 4:17.
- Bratanov, K., Chakurov, E., Ganchev T., Popova, J., and Kilyovska, M. 1967. Spermatokinesigraphic characteristics of motility of boar spermatozoa. (Abs.) Internatl. Symp. on Immunology of Spermatozoa & Fertilization. 27-29 Sept. 1967. Center Agr. Sci. Tech. Inf. Dragan Tsankov 6, Sofia, Bulgaria p. 78.
- Braude, R. 1967. The effect of changes in feeding patterns on the performance of pigs. Proc. Nutr. Soc. 26(2):163-181.
- Braude, R. 1967. Index of current research on pigs. XIII. Natl. Inst. Res. in Dairying, Shinfield, Reading, Berks. (ABA 35:2705).
- Braude, R., and Rowell, J. G. 1967. A comparison of dry and wet feeding of growing pigs. J. Agr. Sci. 68:325-330.
- Brauner, Nielsen, P. 1967. Studies on the genetic relationship between the serum amylase system and other blood group systems in pigs. Proc. 10th Europ. Anim. Blood Group Conf. Biochem. Polymorph. Paris, 1966:449-452. (ABA 36:577).
- Breidenstein, B. C. 1967. Standardization of carcass data. Proc. 10th Natl. Pork Indus. Conf. Testing Wksp. 7. Nov. 9-10. Lincoln.
- Briskey, E. J. 1967. Myofibrillar proteins of skeletal muscle. Proc. AMIF Res. Conf. 19:1-28.
- Broadbent, P. J. 1967. Individual feeding device for livestock. (Abs.) Anim. Prod. 9:269-270.



1967

- Brooks, C. C. 1967. Effect of sex, fat, fiber, molasses and thyroprotein on digestibility of nutrients and performance of growing swine. J. Anim. Sci. 26:495-499. (ABA 35:3765).
- Brooks, C. C. 1967. Effect of sex, soybean oil, bagasse and molasses on carcass composition and composition of muscle and fat tissue in swine. J. Anim. Sci. 26:504-509. (ABA 35:3766).
- Brown, J. E., and Nellor, J. E. 1967. Significance of ovarian eosinophilic granulated cells. (gilt). (Abs.) Fed. Proc. 26:426.
- Browning, G. M. 1967. Resume of Long Range Study of Agricultural Research. 30th Annu. Rpt. and Rec. Proc. Conf. Collab., Reg. Swine Breed. Lab., Stillwater, Okla. p. 170.
- Brucks, R. 1967. A study of the K blood group system of swine. Proc. 10th Europ. Anim. Blood Group Conf., Biochem. Polymorph, Paris, 1966:167-170. (ABA 36:578).
- Bruner, W. H., Parker, C. F., and Swiger, L. A. 1967. Tabulation and analysis of data from swine evaluation station and experiment station projects. Ohio Agr. Res. & Dev. Cntr. Res. Rpt. Anim. Sci. pp. 49-50.
- Bryson, J. W. 1967. Appraising competition pig carcasses. J. Dept. Agr. S. Austral. 70:318.
- Buchta, S. 1967. Application of the Landrace breed in the grading up of the Large White pig. Eng. Sum. (Cz.) Zivoc. Vyr. 40(7):511-520.
- Buchta, S. 1967. The use of Landrace pigs to improve Czechoslovak Improved Whites. Eng. Sum. (Cz.) Zivoc. Vyr. 12:511-520. (ABA 36:1648).
- Bullough, P. G., and Heard, T. W. 1967. Pathological lesions associated with the "leg weakness" syndrome in pigs. Brit. Vet. J. 123(7): 305-309.
- Bunch, R. J., Neagle, L. H., and Brinegar, M. J. 1967. Protein for young pigs and subsequent carcass characteristics. (Abs.) J. Anim. Sci. 26:1473.
- Busch, W., and Gangel, H. 1967. On the artificial protrusion of the penis of boars. Eng. Sum. (Ger.) FortPfl. Besam. Aufzucht. Haust. 3(2):98-103.
- Busse, H. 1967. Comments on further steps towards the breeding of a small test pig for medical usage. Eng. Sum. (Ger.) Mon.H. Vet.Med. 22(23):949-954.



1967

- Bustad, L. E. 1967. Miniature pigs in research. Rpt. 6th Annual Swine Day. U. of Calif., Davis. p. 26.
- Butterworth, M. H., Steinhauf, D., and Weniger, J. H. 1967. Stress tolerance as a production character in the pig. 1. The stress syndrome and its relation to other performance characters. Eng. Sum. (Ger.) Zucht.K. 39:179-187.
- Butterworth, M. H., Steinhauf, D., and Weniger, J. H. 1967. Stress tolerance as a production character in the pig. 2. Methods of determining stress proneness and first results on relationship between stress proneness and production characters in the pig. Eng. Sum. (Ger.) Zucht.K. 39:283-294.
- Buttle, H. L., and Hancock, J. L. 1967. The control of ovulation in the sow. J. Reprod. & Fertil. 14:485-487. (ABA 36:1720).
- Byerly, T. C. 1967. How nearly has the laboratory met its original goals? 30th Annu. Rpt. and Rec. Proc. Conf. Collab., Reg. Swine Breed. Lab., Stillwater, Okla. pp. 62.
- Byerly, T. C. 1967. Efficiency of feed conversion. Sci. 157(3791): 890-895.
- Cadantu, L., Palamaru, E., Rosca, N., Maxim, V., Arisanu, I., and Avram, A. 1967. Preparation and use of sow's milk substitutes for early weaned pigs. Eng. Sum. (Rum.) Lucr. Sti. Inst. Cercet. Zooteh. (Bucharest) 25:635-648.
- Cahill, V. R., Deatherage, F. E., Kunkle, L. E., Ockerman, H. W., and Weiser, H. H. 1967. Biochemical and physiological basic for quality of meal and biochemical and bacteriological studies fundamental to the processing of fresh meat. Res. Rpt. Ohio Agr. Res. Dev. Ctr. (Wooster) Anim. Sci. pp. 9-13.
- Calne, R. Y., White, H. J. O., Yoffa, D. R., Maginn, R. R., Binns, R. M., Samuel, J. R., and Molina, V. P. 1967. Observations of orthotopic liver transplantation in the pig. Brit. Med. J. 2:478.
- Calne, R. Y., White, H. J. O., Yoffa, D. E., Binns, R. M., Maginn, R. R., Herbertson, R. M., Millard, P. R., Molina, V. P., and Davis, D. R. 1967. Prolonged survival of liver transplants in the pig. Brit. Med. J. 4(5580):645-648.
- Camo, E., Francovic, S., Pandza, F., and Varenika, D. 1967. Influence of infra-red radiation on both the general development and some characteristics of the blood account of piglets. Eng. Sum. (Ger.) Mon.H. Vet.Med. 22(20):831-833.



1967

- Campbell, A. M., and Turkki, P. R. 1967. Lipids of raw and cooked-ground beef and pork. J. Food Sci. 32(2):143-146.
- Cappucci, D. T. 1967. Porcine gastric ulcers in the United States: a review. Vet. (Oxford) 4(4):213-218.
- Care, A. D. 1967. Measurement of thyrocalcitonin secretion rate by pig thyroid in vivo. Fed. Proc. 26:367.
- Care, A. D., Duncan, T., and Webster, D. 1967. Thyrocalcitonin and its role in calcium homeostasis. J. Endocrinol. 37:155.
- Carlo, I., and Arcelay, C. L. 1967. A swine line developed in Puerto Rico. Eng. Sum. (Sp.) P.R. (Rio Piedras) Agr. Expt. Sta. B. 203. 19 pp.
- Carlo, I., and Arcelay, C. L. 1967. Evaluation of a swine line developed at the Agricultural Experiment Station of the University of Puerto Rico. P.R. U. J. Agr. 51(1):4-21.
- Cartwright, S. F., and Hick, R. A. 1967. Viruses isolated in association with herd infertility, abortions and stillbirths in pigs. Vet. Rec. 81:196-197.
- Carvas, J. 1967. Some problems concerning the productivity and health of stud boars. Eng. Sum. (Cz.) Vet. Med. (Praha) 12:213-220. (ABA 35:3853).
- Cassens, R. G., Hoekstra, W. G., and Briskey, E. J. 1967. Zinc content and subcellular distribution of red versus white porcine skeletal muscle. Amer. J. Physiol. 212, 688.
- Castro, M. P., and Koseki, I. 1967. Evolution of the chromosome complement of the swine cell line IB-RS-2. Sao Paulo Inst. Biol. Arq. 34(4):285-294.
- Catalano, A., and Russo, V. 1967. Influence of protein content of the ration on weight increase and carcass quality of light pigs. Eng. Sum. (It.) Riv. Zootech. Agr. Vet. 5:187-198.
- Catalano, A., and Russo, V. 1967. A study of the carcass characters of pigs slaughtered in the provinces of Parma, Mantua and Reggio Emilia. Eng. Sum. (It.) Prod. Anim. 6:125-137. (ABA 36:2779).
- Cerne, I. 1967. A study of blood groups of pigs in Slovenia. Proc. 10th Eur. Conf. Anim. Blood Grps. Biochem. Polymorph. Paris. 1966:143-146. (ABA 36:579).
- Chamberlain, A. G., and Clent, E. G. 1967. The performance of pigs given similar amounts of digestible energy, protein and lysine. (Abs.) Anim. Prod. 9:273-274.



1967

- Chamberlain, A. G., and Pickup, J. 1967. A study of the variation in pig gamma globulins in relation to active immunity. Index of Pig Res. P.I.D.A. London. pp. 35-36.
- Chamberlain, C. C., Gamble, C. T., Merriman, G. M. and Lidvall, E. R. 1967. Some factors involved in the development of esophagogastric ulcers in swine. Tenn. Agr. Expt. Sta. B. 415.
- Chamberlain, C. C., Merriman, G. M., Lidvall, E. R., and Gamble, C. T. 1967. Effects of feed processing method and diet form on the incidence of esophagogastric ulcers in swine. J. Anim. Sci. 26:72-75.
- Chang, L. W., and Maibach, H. I. 1967. Fetal pig skin in organ culture in dermatologic investigation. J. Invest. Dermat. 49:480-496.
- Chapman, A. B. 1967. Principles and practices used in on-the-farm recording and selection of livestock in the U.S.A. New Zeal. Vet. J. 15(6):99-104.
- Chapman, A. B. 1967. Principles and practices used in livestock improvement programmes in the U.S.A. Proc. New Zeal. Soc. Anim. Prod. 27:17-28.
- Christian, J. A., Ingram, R. H., Judge, M.D., Merkel, R. A., Shelby, C. E. Stouffer, J. R., and Strong, C. L. 1967. Guides for Pork Carcass Evaluation. Recommended Guides for Carcass Evaluation and Contests. Amer. Meat Sci. Assoc. Chicago.
- Christian, L. L. 1967. The seedstock producer in the future. Testing Workshop 7. Proc. 10th Natl. Pork Indus. Conf. Nov. 9-10. Lincoln.
- Chrystall, B. B., and Zobrisky, S. E. 1967. Chemical and physical parameters of swine growth. (Abs.) J. Anim. Sci. 26:1470.
- Chudoba-Drozowska, B., and Kozłowska, K. 1967. Observations on the behaviour of young piglings. Eng. Sum. (Pol.) Med. Weter. 23(1): 47-49. (ABA 36:1637)
- Clague, D. C. 1967. Infertility in pigs. Queensland Agr. J. 93(5): 278-283.
- Clamohoy, L. L., Palad, O. A., Molina, C. D., and Mercado, M. 1967. The effect of three diluters for boar semen on motility rating, hydrogen-ion concentration and dead-alive sperm cells stored at refrigerator temperature. Phil. Agr. 51:327-340. (ABA 37:2773)
- Clamohoy, L. L., Resuello, D. G., and Palad, O. A. 1967. A study of some factors that influence efficiency in swine artificial insemination. Phi. Agr. 51:311-326. (ABA 37:2774).



1967

- Clausen, H., Nortoft Thomsen, R., and Pedersen, O. K. 1967. 55th report on comparative tests with pigs from state recognised breeding centres in 1965-66. Eng. Sum. (Dan.) 360 Beret. Forsogslab, Copenhagen. (ABA 36:574).
- Clawson, A. J. 1967. Influence of protein level, amino acid ratio and caloric density of the diet on feed intake and performance of pigs. J. Anim. Sci. 26(2):328-334.
- Clem, Darwin Randall. 1967. Inheritance of boar semen characteristics. M.S. Thesis, Purdue U. Libr., Lafayette.
- Clem, D. R., Plotka, E. D., Garwood, V. A., and Foley, C. W. 1967. Heritabilities and correlations among boar semen traits. (Abs.) J. Anim. Sci. 26:1464-1465.
- Cole, D. J. A., Duckworth, J. E., and Holmes, W. 1967. Factors affecting voluntary feed intake in pigs. I. The effect of digestible energy content of diet on the intake of castrated male pigs, housed in holding pens and metabolism crates. Anim. Prod. 9:141-148.
- Cole, D. J. A., Duckworth, J. E., and Holmes, W. 1967. Factors affecting voluntary feed intake in pigs. I. The effect of digestible energy content of the diet on the intake of castrated male pigs housed in holding pens and in metabolism crates. Anim. Prod. 9(2): 141-148.
- Cole, D. J. A., Duckworth, J. E., and Holmes, W. 1967. Factors affecting voluntary feed intake in pigs. II. The effect of two levels of crude fibre in the diet on the intake and performance of fattening pigs. Anim. Prod. 9(2):149-154.
- Cole, J. W., and Backus, W. R. 1967. Fasting and stress effects on yield and quality of pork carcasses. (Abs.) J. Anim. Sci. 26:210.
- Cole, J. W., Lynn, J. R., and Ramsey, C. B. 1967. Relationships of commonly-used pork carcass evaluation traits with monetary values. (Abs.) J. Anim. Sci. 26:210.
- Colenbrander, V. F., Frazeur, D. R., and Conrad, J. H. 1967. Composition of sow's milk as influenced by stage of lactation. (Abs.) J. Anim. Sci. 26:1494.
- Colenbrander, V. F., Conrad, J. H., and Frazeur, D. R. 1967. Studies on the composition of sow milk. Proc. Purdue U. Swine Day. Sept. 8, 1967. Lafayette.
- Colyer, D., and Irwin, G. D. 1967. Beef, pork, and feed grains in the Cornbelt. Supply response and resource adjustment. Mo. Agr. Expt. Sta. Res. B. #921.



1967

- Comberg, G., Wolfermann, H. F., and Rundfeldt, H. 1967. The influence of temperature and relative humidity on weight gain and food conversion in fattening pigs. Eng. Sum. (Ger.) Z. Tierzucht. ZuchtBiol. 83:240-259. (ABA 35:3767).
- Combs, W. 1967. Breeding research problems. Proc. 1st Work Planning Meet. Swine Res., Canada Dept. Agr. Brandon, p. 9.
- Conley, G. O., Kratzer, D. D., and Bicknell, E. J. 1967. Genetic analysis of gastric ulceration in swine. (Abs.) J. Anim. Sci. 26: 884.
- Cook, B., Kaltenbach, C. C., Norton, H. W., and Nalbandov, A. V. 1967. Synthesis of progesterone in vitro by porcine corpora lutea. Endocrinol. 81:573-584.
- Cook, G. L., and Cuthbertson, A. 1967. Comparison of echo-sounding machines and operators for measurement of performance test boars. (Abs.) Anim. Prod. 9:278. (ABA 35:2119).
- Cooper, M. McG., and Tonks, H. M. 1967. A co-ordinated breeding programme. PIDA Index of Pig Res. Jan. pp. 79-82.
- Cowart, W. O., and Morehouse, L. G. 1967. Effects of attenuated hog cholera virus in pregnant swine at various stages of gestation. J. Amer. Vet. Med. Assoc. 151(12):1788-1794.
- Cox, D. F. 1967. Survival and gestation in pigs. Evol. 21:195-196. (ABA 36:593).
- Cox, D. F. 1967. Birth weight in pigs descended from irradiated spermatogonia. Mutat. Res. 4(6):865-869.
- Cox, D. F., and Smith, C. 1967. Herd differences and genetic trends in backfat. (Abs.) J. Anim. Sci. 26:884.
- Crees, S. J. 1967. Some experiences with miniature swine. J. Inst. Anim. Tech. 18(4):167-173.
- Crichton, D. B. 1967. Effects of lactation on the pituitary gonadotrophins of the sow. Reproduction in the Female Mammal. Butterworth, London. pp. 223-238. (ABA 36:3859).
- Crichton, D. B. 1967. Effects of lactation on reproduction in the sow. Ph.D. Thesis, U. Nottingham.
- Cruz, N. C. V. 1967. Collecting semen from boars with a modified artificial vagina. Phil. J. Anim. Indus. 22(1/4):195-197.



1967

- Csire, L. 1967. Problems and advantages of breeding hybrid pigs. Eng. Sum. (Hung.) Allattenyesztes 16:193-202. (ABA 36:539).
- Csire, L. 1967. Slaughter pig production and research in Hungary after World War II. Eng. Sum. (Ger.) World Rev. Anim. Prod. 3(2): 83-95.
- Csire, L., and Csoka, S. 1967. The suitability for ham production of crossing Hungarian White and British Landrace pigs. Eng. Sum. (Hung.) Allattenyesztes 16:145-154. (ABA 35:3768).
- Csoka, S., and Csire, L. 1967. The suitability of crossing Hungarian White and British Landrace pigs for bacon. Eng. Sum. (Hung.) Allattenyesztes 16:353-363. (ABA 36:1650).
- Csoka, S., and Papp, J. 1967. Investigation on the effect of feeding of different intensity on fattening of Hungarian White pigs. Eng. Sum. (Hu). Allattenyesztes 16(2):155-165.
- Culzoni, V. 1967. Morphological characteristics of the development of intersexuality in mammals, particularly pigs, and their cytogenetic condition. Eng. Sum. (Fr.) Ateneo Parmense 38:359-370. (ABA 37:688).
- Cummings, J. N. 1967. Estrus synchronization of gilts and sows by the oral administration of methallibure (ICI Compound 33828). Canad. Vet. J. 8(5):104-109. (ABA 36:594).
- Cunningham, H. M. 1967. Effect of diazoxide on blood glucose, plasma-free fatty acids, urine catecholamines and the retention of water and nitrogen in pigs. Canad. J. Anim. Sci. 47(1):11-15.
- Cunningham, P. J., and Omtvedt, I. T. 1967. Performance of lines and line crosses in swine. (Abs.) J. Anim. Sci. 26:203.
- Cunningham, P. J., Omtvedt, I. T., and Whatley, J. A. Jr. 1967. Comparison of lines and linecrosses for economically important traits in swine. Okla. Agr. Expt. Sta. MP 79:5.
- Cuperlovic, M. 1967. Free amino acids in the blood plasma of newborn piglets before and after the first intake of colostrum. Acta Vet. Scand. 8:217-227.
- Cupka, V. 1967. The relation between ham weight and other carcass characters in the pig. (Cz.) Ved. Prace Vysk. Ust. Zivoc. Vyroby, Nitre 5:179-196. (ABA 36:1651).
- Cupka, V., and Majerciak, P. 1967. The acclimatisation in Czechoslovakia of Landrace pigs of different origins. Eng. Sum. (Cz.) Zivoc. Vyr. 12(5):367-376. (ABA 35:3754).



1967

- Curtis, R. J. 1967. Effect of floor space and numbers per pen on performance of pigs. (Abs.) Proc. Canad. Soc. Anim. Prod. Annu. Meet. Montreal, Quebec, June 26-29.
- Curtis, S. E., Heidenreich, C. J., and Harrington, R. B. 1967. Age dependent changes of thermostability in neonatal pigs. Amer. J. Vet. Res. 128(127):1887-1890.
- Curtis, S. E., Heidenreich, C. J., and Martin, T. G. 1967. Relationship between bodyweight and chemical composition of pigs at birth. J. Anim. Sci. 26:749-751.
- Czyrek, B. 1967. The sex of slaughter pigs and their reaction to stressors connected with transport. Eng. Sum. (Pol.) Med. Weter. 23(9):538-541. (ABA 36:1638).
- Dammers, J., Kampelmacher, E. H., Edel, W., and Schothurst, M. 1967. The effect of decontamination of feed mixtures by heat treatment and gamma-radiation on growth and feed conversion of fattening pigs. Eng. Sum. (Du.) Tijdschr. Landb. 79(4):106-109.
- Davidson, W. D. 1967. A study of ante-mortem fasting and post-mortem processing treatment effects on some qualitative and quantitative aspects of swine, pork carcasses, cuts and products. Diss. Abs. Sect. B. 27(11):3732B.
- Day, B. N., Polge, C., Moor, R. M., Rowson, L. E. A., and Booth, W. D. 1967. Local effect of the uterus on the corpora lutea of early pregnancy in swine. (Abs.) J. Anim. Sci. 26:1499.
- Day, B. N., Longenecker, D. E., Jaffe, S. C., Gibson, E. W., and Lasley, J. F. 1967. Fertility of swine following superovulation. J. Anim. Sci. 26:777-780. (ABA 36:595).
- DeBaca, R. C., Rust, R. E., and Hazel, L. N. 1967. Crossbreeding in swine. Wld. Fmg. 9(11):16-17.
- Degard, A. K. 1967. A comparison of different schemes for performance test selection. Acta Agr. Scand. 17(4):167-173.
- De La Porte Des Vaux, H., and Aumaitre, A. (with Deniel, R., and Dewulf, H.) 1967. Effect of environmental temperature on changes in rectal temperature and blood sugar in newborn piglets. Eng. Sum. (Fr.). Ann. Zootech. 16:235-245.
- Detweiler, D. K. and Luginbuhl, H. 1967. Arteriosclerosis in animals. Atherosclerotic Vascular Disease, Appleton-Century-Croft, New York, p. 50.



1967

Dhindsa, Dharam Singh. 1967. Influence of the number and location of embryos on maintenance of pregnancy in the pig. Ph.D. Thesis, U. Ill. Libr., Urbana.

Dhindsa, D. S. 1967. The influence of the number and location of embryos on maintenance of pregnancy in the pig. Diss. Abs. 28(4):1671B. (ABA 36:3860).

Dhindsa, D. S., and Dziuk, P. J. 1967. Partial doubling of the uterine horns in the gilt. Vet. Med. Small Anim. Clin. 62(9):900-902.

Dhindsa, D. S., Dziuk, P. J., and Norton, H. W. 1967. Time of transuterine migration and distribution of embryos in the pig. Anat. Rec. 159(3): 325-330. (ABA 37:691).

Dickerson, G. E. 1967. Theoretical and practical consideration in the solution of swine breeding problems. 30th Annu. Rpt. and Rec. Proc. Conf. Collab., Reg. Swine Breed. Lab., Stillwater, Okla. p. 92.

Diggs, B. G., and Baker, B. Jr. 1967. Effect of number of pigs per pen on performance of hogs. (Abs.) J. Anim. Sci. 26:207.

Diggs, B. G., and Baker, B. Jr. 1967. Comparison of daily vs. intermittent feeding of sows during gestation. (Abs.) J. Anim. Sci. 26: 214.

Dillard, E. U., and Robison, O. W. 1967. Crossbreeding swine for commercial production. N. C. Agr. Expt. Sta. B. 432. 19 pp.

Dimov, Ja. 1967. The reproductive performance of  $F_1$  crossbred sows (Bulgarian White  $\text{♀}$  x Landrace  $\text{♂}$ ) mated with boars of the dam's breed. Eng. Sum. (Bulg.) Zhivotn. Nauki 4(5):21-27. (ABA 36:596).

Dimov, Ja., and Zivkova, I. 1967. Early stages of embryogenesis and embryo development in Bulgarian White sows crossed with Landrace boars. Eng. Sum. (Bulg.) Zhivotn. Nauki 4(4):25-35. (ABA 36:597).

Dimov, Ja., and Zhivkova, I. 1967. Investigations into the fattening capacity and slaughter properties of 3/4 Bulgarian White and 1/4 Landrace pig crosses. Eng. Sum. (Bu.) Zhivotnovudni Nauk. 4(3): 27-35.

Dobbing, J., and Dickerson, J. W. T. 1967. A study of the development of the pig's central nervous system. PIDA Index of Pig Res. pp. 69.

Dokov, V. K. 1967. Fluorescent-cytochemical studies on spermatozoa of some domestic animals (bull, ram, boar). (Abs.) Internatl. Symp. on Immunol. of Spermatozoa & Fertilization, 27-29, Sep. 67. Center for Agr. Sci. & Tech. Inf. Dragan Tsankov, Sofia, Bulgaria. p. 83.



1967

- Doman, L. 1967. Data on the breeding value of long lived sows. Eng. Sum. (Hu.) Magyar. Allat. Lapja 22(6):274-276.
- Domanski, J. 1967. Influence of the time of the second mating upon fertility of sows in the double mating system. Zesz. Probl. Postep. Nauk. Roln. 67(5):113-116.
- Domert, A. R., Tumbleson, M. F., and Strafuss, A. C. 1967. Hematologic and biochemic values in miniature swine with melanomas. J. Amer. Vet. Med. Assoc. 150, 1316, abs. 71.
- Done, J. T., and Harding, J. D. J. 1967. Congenital tremor of swine: Lesions and causes. Deut. Tierarztl. Wchn.Schr. 74(13):333-336.
- Done, J. T., Loosmore, R. M., and Saunders, C. N. 1967. Dermatitis vegetans in pigs. Vet. Rec. 80(9):292-297.
- Doornenbal, H. 1967. Value of subcutaneous fat and backfat measurements on the live animal and the carcass as predictors of external, internal and total carcass fat in market weight pigs. J. Anim. Sci. 26:1288-1295. (ABA 36:1652).
- Dorozilov, A. E., and Pavlicenko, V. P. 1967. The effect of blood transfers to boars on the productivity and pigmentation of the progeny. Eng. Sum. (Russ). Vest. Sel. Hoz. Nauki (Moscow) 12(9):108-111. (ABA 36:543).
- Drane, H. M., and Saba, N. 1967. Oestrogenic activity in sow plasma during pregnancy. J. Endocrinol. 39:449-450.
- Drazan, J. 1967. Early weaning of piglets. Eng. Sum. (Cz.) Vet. Med. (Praha) 40(4):177-199.
- Drennan, P. 1967. The relationship between the digestible and metabolisable energy of pig rations and some of their chemical components. M. Agr. Sci. Thesis, U. Col., Dublin.
- Dressler, J., and Mach, P. 1967. Development of the activity of intracellular enzyme systems of piglet blood from birth to weaning. II. Alkaline phosphomonoesterase of neutrophils. Eng. Sum. (Ger.) Zent. Bl. Vet. Med. Reihe A, 14(6):548-553.
- Drumright, L. 1967. The importance of selection of source and supply of feeder pigs. Feeder Pigs, Workshop 6. Proc. 10th Natl. Pork Indus. Conf. Nov. 9-10. Lincoln.
- Dsire, L. 1967. Slaughter pig production and research in Hungary after World War II. Eng. Sum. (Ger.) World Rev. Anim. Prod. 3(11): 83-95.



1967

- Dukelow, W. R., Chernoff, H. N., and Williams, W. L. 1967. Properties of decapacitation factor and presence in various species (boar). J. Reprod. Fertil. 14:393-399.
- DuMesnil DuBuisson, P. F. 1967. Control of corpus luteum maintenance in the sow. (Fr.) Arch. Anat. Microsc. Morph. Exp. 56(3/4) Suppl: 358-372.
- Dvorak, M. 1967. The serum cholesterol level in piglets in relation to age and to the adrenocortical activity. Eng. Sum. (Cz.) Vet. Med.(Praha) 40(2):61-67.
- Dvorak, M. 1967. The level of free 17-hydroxycorticosterone in the blood plasma of swine and its relation to the age of swine. Eng. Sum. (Cz.). Vet. Med. (Praha) 40(1):43-48.
- Dvorak, M., and Podany, J. 1967. The ascorbic acid content of the testes of boars in the growth period. Eng. Sum. (Cz.) Doc. Vet. (Brno) 5:25-30. (ABA 36:2841).
- Dyck, G. W. 1967. Ovarian function following pituitary stalk-section or hypophysectomy in the pig. Diss. Abs. 27(11):4097B.
- Dziuk, P. J. 1967. Intrauterine crowding and embryo survival in the pig. (Abs.) J. Anim. Sci. 26:1494.
- Eason, Douglas Wilson. 1967. Investigations on the influence of energy intake on the reproductive performance in swine. M.S. Thesis, N. C. State U. Libr., Raleigh.
- Ebermann, R., and Bodenseher, H. 1967. Serum amylase types in swine. Eng. Sum. (Ger.) Bodenkultur 18(4):322-325. (ABA 36:3844).
- Echternkamp, S. E., Teague, H. S., Plimpton, R. F. Jr., Grifo, A. P. Jr., and Gomes, W. R. 1967. Glandular development in the boar, boar carcass, odor and flavor and the effects of implanted diethylstilbestrol. (Abs.) J. Anim. Sci. 26:1496.
- Edwards, Ronnie Lee. 1967. A preliminary investigation of the effects of high ambient temperatures prior to breeding and in early gestation in swine. M.S. Thesis, Okla. State U. Libr., Stillwater.
- Eidrigovich, E. B., Osipov, K. V., Zaplatnikov, A. K., Bazarnyi, V. M., D'yakova, A. A., and Rumyantsev, B. N. 1967. Stimulating gain of swine and cattle by feeding bromides. Eng. Sum. (Russ.) Vest. Sel.Hoz. Nauki (Moscow) 1:82-87.
- Einarsson, S. 1967. Development and scope of pig insemination in Sweden. Svinskotel 57:329-333.



1967

- Elsley, F. W., and Anderson, D. M. 1967. An investigation to determine whether variations in dietary energy and/or protein quality will affect the reproductive performance of sows, their nitrogen retention during pregnancy and liver protein stores. PIDA Index of Pig Res. Jan. pp. 29-30.
- Elsley, F. W., and Bannerman, M. M. 1967. Co-ordinated experiments with sows. PIDA Index of Pig Res. Jan. pp. 28-29.
- Elsley, F. W. H., Bannerman, M., Bathurst, E. V. J., Bracewell, A. G., Cunningham, J. M. M., Dodsworth, T. L., England, G. J., Forbes, T. J., and Laird, R. 1967. Study of the effects of different levels of feeding in pregnancy and lactation on sow productivity. (Abs.) Anim. Prod. 9:270-271.
- England, D. C. 1967. Effect of tail-biting on growth rate of swine. (Abs.) J. Anim. Sci. 26:390-391.
- England, D. C., and Spurr, D. T. 1967. Litter size of swine confined during gestation. (Abs.) J. Anim. Sci. 26:891.
- Englisch, H. G. 1967. Investigation of the efficiency of selection in pig breeding based on results of performance tests on Improved Landschwein and German Edelschwein in respect of breeding, fattening and carcass characters from 1946 to 1964 in the breeding area covered by the Animal Breeding Inspectorate, Potsdam. Eng. Sum. (Ger.) Arch. Tierzucht. 10(6):413-433. (ABA 37:1672).
- Eppstein, S. H. 1967. Isolation and characterization of porcine prolactin. Proc. 6th Pan-Amer. Cong. Endocrinol. Mexico City. Oct. 10-15, 1965. pp. 340-347.
- Erickson, B. H. 1967. Radioresponse of the prepuberal porcine ovary. Internatl. J. Radiat. Biol. 13(1):57-68.
- Ericsson, R. J., and Baker, V. F. 1967. Binding of tetracycline to mammalian spermatozoa, (Boar). Nature 214:403-404.
- Espey, L. L. 1967. Tenacity of porcine Graafian follicle as it approaches ovulation. Amer. J. Physiol. 212(6):1397-1401. (ABA 36:3864).
- Fabbri, R., and Semprini, P. 1967. Preliminary data on the effects of the Baiburtcjan partial castration of pigs. Eng. Sum. (Ital.) Atti. Soc. Ital. Sci. Vet. 21:529-532.
- Fewson, D. 1967. Planning of crossbreeding of pigs. Eng. Sum. (Ger.) Wiss. Z. Humboldt U. Math-Nat. Wiss. 16(4):531-546.



1967

- Fewson, D., Bockenhoff, E., and Bischoff, T. 1967. The economic importance of various production characters in pigs and their effect on breeding. Effect on breeding. Eng. Sum. (Ger.) ZuchtK. 39(5):324-330.
- Fewson, D., Gressel, A., Rittler, A., and Kokoschka, H. 1967. Investigations on the influence of chance variations on slaughter results in pigs. Eng. Sum. (Ger.) Zucht.K. 39:200-209. (ABA 36:1656).
- First, N. L. 1967. Swine artificial insemination, Reprod. Wksp. #9. Proc. 10th Natl. Pork Indus. Conf. Nov. 9-10 Lincoln.
- Fischer, T. V. 1967. Local uterine regulation of the corpus luteum. (pig). Amer. J. Anat. 121:425-441.
- Flock, D. 1967. Calculation of coefficients of relationship from the frequency of sib pairs (swine). Eng. Sum. (Ger.) Z. Tierzucht. Zucht.Biol. 83(3):235-239. (ABA 35:3836).
- Flynn, M. A., Hanna, F., Long, C., Lutz, R., and Zobrisky, S. E. 1967. Deuterium oxide dilution as a predictor of body composition in children and pigs. Proc. Body Comp. Conf. NAS-NRC, Washington.
- Foley, C. W., Marsh, H. M., Heidenreich, C. J., Garwood, V. A., and Erb, R. E. 1967. Effects of zero and three-day storage of washed boar spermatozoa on subsequent incubation characteristics. J. Anim. Sci. 26:1072-1077.
- Foley, C. W., and Phibbs, P. V. 1967. Effect of bicarbonate on respiration of spermatozoa, (pig, rabbit). (Abs.) Fed. Proc. 26:645.
- Foley, C. W., and Williams, W. L. 1967. Effect of bicarbonate and oviduct fluid on respiration of spermatozoa. (boar). Proc. Soc. Expt. Biol. Med. 126:634-637.
- Folley, S. J., and Linford, E. 1967. A study of the metabolism of boar semen with special reference to improvement of semen diluents and semen storage. PIDA Index of Pig Res., London, Jan. pp. 22-23.
- Ford, J. J., and Anderson, L. L. 1967. Growth in immature hypophysectomized pigs. J. Endocrinol. 37(3):347-348.
- Forrest, J. C. and Briskey, E. J. 1967. Response of striated muscle to electrical stimulation. J. Food Sci. 32:483.
- Fowler, V. R. 1967. The influence of alternating high and low feeding levels on the performance and composition of the pig. (Abs.) Anim. Prod. 9:272.



1967

- Francis, Richard Paul. 1967. Influence of gonadal steroids on the duration of pseudopregnancy. M.S. Thesis, Purdue U. Libr., Lafayette.
- Frape, D. L., and Hocken, R. W. 1967. The effect of pattern of daily feeding of pregnant sows on apparent digestibility. Anim. Prod. 9(4):547-552.
- Fredeen, H. T. 1967. Unsolved problems for the swine breeder. 30th Annu. Rpt. and Rec. Proc. Conf. Collab., Reg. Swine Breed. Lab., Stillwater, Okla. p. 75.
- Fredeen, H. T., and Martin, A. H. 1967. Factors influencing selection intensity in pig breeding operations. Canad. J. Anim. Sci. 47(3): 161-170. (ABA 36:2822).
- Fredeen, H. T., and Reddon, A. 1967. Post-weaning performance of SPF pigs reared in isolation vs. litter mates reared with non-SPF pigs. Canad. J. Anim. Sci. 47(1):1-9. (ABA 35:3821).
- Freeman, A. E. 1967. Genetic aspects of the efficiency of nutrient utilization for milk production. J. Anim. Sci. 26:976-983.
- Friend, D. W., and Cunningham, H. M. 1967. Growth, carcass. blood and fat studies with pigs fed once or five times daily. J. Anim. Sci. 26(2):316-322.
- Fritz, R. B., Lassiter, S., and Day, E. D. 1967. A quantitative precipitin study of porcine fibrinogen employing paired labels. J. Immunol. 98(6):1213-1217.
- Frobish, L. T., Hays, V. W., Speer, V. C., and Ewan, R. C. 1967. Digestion of sow milk fat and effect of diet form on fat utilization (Abs.) J. Anim. Sci. 26:1478-1479.
- Gabris, J. 1967. Problems of line-breeding of pigs and working process for line formation. Nas Chov. (Prague) 27(11), 24.
- Gabris, J. 1967. The growth in thickness of the cutaneous fat layer in Czechoslovak Improved White swine breed. Eng. Sum. (Cz.) Pol'nohospodarstvo 13(9):676-683.
- Gabris, J., and Brincko, A. 1967. The relation between useful character in sows in the first three litters. Eng. Sum. (Cz.) Zivoc. Vyroba 12:35-42. (ABA 35:2716).
- Gabrovski, P. 1967. Feeding pigs with wheat and their carcass evaluation. Vet. Sbirka (Sofiya) (9/10), 28.



1967

- Galloway, D. E., and Goll, D. E. 1967. Effect of temperature on molecular properties of post-mortem porcine muscle. J. Anim. Sci. 26:1302-1308.
- Gamble, C. T., Chamberlain, C. C., Merriman, G. M., and Lidvall, E. R. 1967. Effects of age, pasture and selected diet ingredients on the incidence of esophagogastric ulcers in swine. (Abs.) J. Anim. Sci. 26:214.
- Garbers, D. L., and First, N. L. 1967. Effect of various dose levels of ICI 33828 on sow and gilt reproductive functions. (Abs.) J. Anim. Sci. 26:943.
- Gardner, G. A. 1967. Discoloration in cooked ham. Proc. Biochem. 2(3):49-52.
- Garwood, V. A. 1967. Plotting loin-eye areas by computer. (Abs.) J. Anim. Sci. 26:895.
- Garwood, V. A., and Judge, M. D. 1967. Selection for pork carcass improvement. Proc. Swine Day. Sept. 8, 1967. Lafayette, Purdue U. Anim. Sci. Dept. Mimeo. AS-374.
- Garwood, V. A., Waltz, F. A., and Heidenreich, C. J. 1967. Prenatal and postnatal influences on weight and backfat thickness of pasture-raised swine. J. Anim. Sci. 26:674-677. (ABA 36:544).
- Gatherum, D. P., and Macdougall, D. B. 1967. The effect of breed on curing with special reference to weight losses and appearance. PIDA Index of Pig Res. London. pp. 8-9. Jan.
- Gavallier, M., Hojny, J., Hradecky, J., Linhart, J., and Schroffel, J. 1967. Blood groups and serum proteins in pigs. Proc. 10th Europ. Anim. Blood Group Conf. Biochem. Polymorph., Paris, 1966: 159-164. (ABA 36:580).
- Gavora, J. 1967. Variation of some economic characters of Improved White pigs in Slovakia. I. Eng. Sum. (Cz.) Pol'nohospodarstvo 13: 664-675. (ABA 36:1658).
- Gavora, J. 1967. Variation of some economic characters of Improved White pigs in Slovakia. II. Eng. Sum. (Cz.) Pol'nohospodarstvo 13:750-763. (ABA 37:619).
- Georgiev, I., and Angelov, I. 1967. Productive and carcass qualities of different crosses between Bulgarian White, Berkshire and Swedish Landrace. Nauchni Trud. Vissh. Sel'Skostop Inst. G. Dimitrov, 17, 53.



1967

- Georgiev, I., Angelov, I., and Benkov, B. 1967. Slaughter quality of pigs issued from crossing between pigs of Bulgarian White breed and Landrace boars. Zhivotn. Nauki, (Sofia) 4, (7), 3.
- Georgiev, I., Stoev, P., and Koinarski, V. 1967. Fattening of pigs in open and closed pigsties in Kneza district. Nauchni Trud. Vissh SelSkostop. Inst. G. Dimitrov. 17, 81.
- Georgiev, I., Stojanov, K., and Dimitrov, Vl. 1967. Control of fattening data as a selection index in the improvement of pigs of the Bulgarian White breed for meat. Nauchni Trud. Vissh SelSkostop. Inst. G. Dimitrov, 17, 63.
- Georgiev, I., Zanev, T., and Mirceva, D. 1967. Comparative study of fattening qualities of crosses of Bulgarian White pigs with Landrace and Large White boars. Zhivotn. Nauki, (Sofia) 4(6), 33.
- Gerneke, W. H. 1967. Cytogenetic investigations on normal and malformed animals, with special reference to intersexes. (incl. pig. sheep, cattle, wildebeest (*Gorgon taurinus*) mongoose (*Cynictis penicillata*) Onderstepoort J. Vet. Res. 34:219-299.
- Gerrits, R. J. 1967. Sterilization of boars with cadmium chloride. (Abs.) J. Anim. Sci. 26:228.
- Gerrits, R. J., and Kraeling, R. R. 1967. Polymorphism in a casein fraction of sow's milk. (Abs.) J. Anim. Sci. 26:874.
- Gillett, T. A. 1967. Variation in potassium and sodium as related to body composition. Diss. Abs. Sect. B. 27(12):4440B.
- Ginther, O. J. 1967. Local utero-ovarian relationships. J. Anim. Sci. 26:578-585.
- Gjedrem, T. 1967. Selection indexes compared with single trait selection I. The efficiency of including correlated traits (pig). Acta Agr. Scand 17(4):263-268.
- Gjedrem, T. 1967. Selection indexes compared with single trait selection II. The efficiency of selection for a trait when included as an index (pig). Acta Agr. Scand. 17(4):269-275.
- Glasnak, V. 1967. Protein polymorphism in sow's milk. Proc. 10th Europ. Anim. Blood Group Conf. Biochem. Polymorph. Paris, 1966: 433-435. (ABA 36:581).
- Gligor, V., Nedelniuc, V., and Radu, A. 1967. Effect of temperature of sty on growth and fattening of pigs. Eng. Sum. (Rum) Rev. Zooteh. Med. Vet. 17:(8):2-11.



1967

- Glover, T. D., and Rigby, J. P. 1967. The persistence of spermatozoa at the uterotubal junction of the sow. Faculty of Vet. Sci. U. of Liverpool, Liverpool, Eng. Index of Pig Res. PIDA London, Jan. pp. 67-68.
- Gluhovschi, N., Bistriceanu, M., Bilcea, P., Iusco, V., and Nafornta, M. 1967. Hereditary malformation of the spinal column in pigs. Eng. Sum. (Rom.) Lucr. Sti. Inst. Agron. Timisoara Ser. Med. Vet. 10:339-352. (ABA 37:3861).
- Gluhovschi, N., Bistriceanu, M., Nafornta, M., Iusco, V., and Bratu, M. 1967. Identification of a hereditary anomaly in pigs, characterised by shortening of the vertebral column and reduction in the number of vertebrae. Eng. Sum. (Fr.) Recueil Med. Vet. 143(9):827-839. (ABA 36:1702).
- Goodman, P., Latta, J. S., Wilson, R. B., and Kadis, B. 1967. Massive smooth endoplasmic reticulum in porcine granulosa lutein cells. (Abs.) Anat. Rec. 157:249-250.
- Gower, D. B., and Ahmad, N. 1967. Studies on the biosynthesis of 16-dehydro steroids. The metabolism of (4-<sup>14</sup>C) pregnenolone by boar adrenal and testis tissue in vitro. Biochem. J. 104:550-556.
- Graves, W. E., Lauderdale, J. W., Kirkpatrick, R. L., First, N. L., and Casida, L. E. 1967. Tissue changes in the involuting uterus of the postpartum sow. J. Anim. Sci. 26(2):365-371.
- Greaser, M. L., Cassens, R. G., and Hoekstra, W. G. 1967. Changes in oxalate-stimulated calcium accumulation in particulate fractions from post-mortem muscle. J. Agr. Fd. Chem. 15:1112.
- Greaser, M. L., Cassens, R. G., Hoekstra, W. G., and Briskey, E. J. 1967. Relaxing factor activity of post-mortem. (Abs.) J. Anim. Sci. 26:895.
- Green, C. W. 1967. Food conversion in breeding stock. (Swine) Kenya Fmr. 132:36.
- Greene, R. 1967. The Hog of the Future: Panel discussion. Part I. Spec. Wksp. Sect. 2. Proc. 10th Natl. Pork Indus. Conf. Nov. 9-10. Lincoln.
- Griss, G., Keck, J., Engelhorn, R., and Tuppy, H. 1967. Isolation and purification of an ovarian polypeptide with uterine-relaxing activity (pregnant sows). Biochim. Biophys. Acta 140:45-54.
- Groves, T. W. 1967. Methallibure ("Aimax", I.C.I. 33,828) in the synchronisation of oestrus in gilts. Vet. Rec. 80(15):470-475. (ABA 35:3861).



1967

- Gruhn, R., and Von Selle, K. O. 1967. Investigations on genetic serum transferrin polymorphism in the pig. Eng. Sum. (Ger.) Zuchtungskund 39:88-94. (ABA 36:582).
- Guenther, J. J. 1967. Qualitative characteristics of the meat animal as influenced by physiological maturity equivalents. Proc. 20th Annu. Recip. Meats Conf. June 14-16, Lincoln, Nebr. 20:88-95.
- Gunnarson, H. J., Butchbaker, A. F., Witz, R. L., and Dinusson, W. E. 1967. Effect of air velocity, air temperature, and mean radiant temperature on performance of growing-finishing swine. Trans. Amer. Soc. Agr. Engrs. Gen. Edn. 10:715-717, 722. (ABA 37:649).
- Gunther, M. 1967. Dermoidal mammary cysts in mother pigs. Eng. Sum. (Ger.) Mon.H. Vet. Med. 22(3):96-98.
- Gupta, S., Bhattacharya, S., and Moulick, S. K. 1967. Studies on weaning performance in Large White pigs. Indian J. Vet. Sci. 37(3): 138-142. (ABA 37:1631).
- Haaranen, S. 1967. The haemoglobin percentage of swine blood. Eng. Sum. (Fi) Suomen Elainlaakarilehti 73(13):364-367.
- Haase, H. 1967. Results of breeding-hygienic investigations of boars in the district of Dresden. Eng. Sum. (Ger.) FortPfl. Besam. Aufzucht Haust. 3(2):124-140.
- Hahan, G., Kolb, E., and Seidel, H. 1967. Investigations on the sodium, potassium total phosphorus, calcium and magnesium concentration in serum as well as the total phosphorus and hemoglobin content in blood of sows during the periods of pregnancy and lactation. Eng. Sum. (Ger.) Arch. Tierernahr. 17(4/5):295-306.
- Hala, K. 1967. The occurrence of erythrocyte antigens on cells from various tissues of the pig. Folia Biol. (Praha) 13(3):189-192.
- Halada, J., and Jakubec, V. 1967. The effect of genealogical lines on the fattening ability and carcass value of pigs. Eng. Sum. (Cz.) Zivoc. Vyroba 12:521-532. (ABA 36:1703).
- Hale, O. M., and Southwell, B. L. 1967. Differences in swine performance and carcass characteristics because of dietary protein level, sex and breed. J. Anim. Sci. 26:341-344. (ABA 35:3774).
- Hale, O. M., Johnson, J. C. Jr., and Southwell, B. L. 1967. Influence of dietary protein level on performance and carcass traits of swine. Ga. Agr. Expt. Sta. Res. B. 13. (ABA 37:623).



1967

- Hale, O. M., Johnson, J. C., and Southwell, B. L. 1967. Influence of kind and level of fat, carbohydrate source, and breed on performance and carcass traits of swine. Ga. Agr. Expt. Sta. Res. Rep. 18.
- Hamilton, P. Y. 1967. Breed comparisons in hogs. Macdonald Farm J. 28(8):5, 10.
- Hancock, J. L. 1967. The ultrastructure of mammalian spermatozoa. Adv. Reprod. Physiol. 1:125.
- Hansson, A., and Belic, M. 1967. Effect of inbreeding on some characteristics in swine. Eng. Sum. (Swe.) Uppsala Lantbr. Hogskol. Meddel. Ser. A. 76.
- Hard, W. L. 1967. The anatomy and cytogenetics of male pseudo-hermaphroditism in swine. (Abs.) Anat. Rec. 157:255-256. (ABA 35:2762).
- Haring, F., Gruhn, R., and Smidt, D. 1967. The Gottingen miniature pig. Eng. Sum. (Ger.) World Rev. Anim. Prod. FAO Spec. Issue: 76-87. (ABA 37:2680).
- Harris, M. 1967. Growth inhibition in mammalian cells exposed to thermal stress. (Swine) Experientia 23(7):563-564.
- Hartmann, W., and Fewson, D. 1967. Pig breeding plans. ZuchtK. 39:1-11. (ABA 35:2744).
- Hartree, A. S. 1967. Immunological cross-reaction of pituitary LH from other species with human pituitary LH. Fed. Proc. 26:533.
- Harvey, W. R. 1967. Estimation of breeding values with least-squares and maximum likelihood techniques. 19th Annu. Rpt. NC-1 & Proc. Annu. Meet. Tech. Comm. Aug. 21-23, 1967, Wooster. pp. 53-62.
- Harvey, W. R., and Swiger, L. A. 1967. Fitting polynomials to least-squares constants. (Abs.) J. Anim. Sci. 26:1463-1464.
- Haschke, W. 1967. Analysis of daily weight gains in your Improved Landrace boars in the breeding district of Saxony and Anhalt for the year 1946-60 and 1964. Eng. Sum. (Ger.) Kuhn-Archiv. 81: 189-225. (ABA 36:2803).
- Hatherill, C. W. B. 1967. A pig survey of British Honduras, 1967. J. Agr. Soc. Trinidad and Tobago (Port-of-Spain) 67:81-93. (ABA 36:529).
- Hayes, R. L., and Allen, E. R. 1967. Identification of a beaded filament of embryonic collagen (pig). (Abs.) Anat. Rec. 157:257.



1967

- Hayes, R. L., and Allen, E. R. 1967. Electron-microscopic studies on a double-stranded beaded filament of embryonic collagen (pig). J. Cell Sci. 2:419-434.
- Haynes, N. B., and Lamming, G. E. 1967. The carbohydrate content of sow uterine flushings. J. Reprod. Fertil. 14:335-337. (ABA 36:602)
- Haynie, R. G. 1967. Price and grade determinations in red meat animals Natl. Inst. Anim. Agr. Proc. 17th Conf. 96-101.
- Hazel, L. N. 1967. Assignment of priorities for future research. 30th Annu. Rpt. and Rec. Proc. Conf. Collab., Reg. Swine Breed. Lab., Stillwater, Okla. p. 167.
- Heap, F. C., and Lodge, G. A. 1967. Changes in body composition of the sow during pregnancy. Anim. Prod. 9(2):237-245.
- Heap, F. C., Lodge, G. A., and Lamming, G. E. 1967. The influence of plane of nutrition in early pregnancy on the survival and development of embryos in the sow. J. Reprod. Fertil 13(2):269-279. (ABA 35:3862).
- Heard, T. W., and Jollans, J. L. 1967. Observations on a closed hysterectomy founded pig herd. Vet. Rec. 81:481-487. (ABA 36:1660).
- Hedrick, H. B., Zinn, D. W., Zobrisky, S. E., and Bailey, M. E. 1967. Quantitative relationships of meat animal composition during growth and development. Proc. 20th Annu. Recip. Meats Conf. June 14-16, Lincoln, Nebr. 20:55-87.
- Heitman, H. Jr. 1967. Feeding level and reproduction performance in the sow. Sixth Annu. Swine Day, U. of Calif. p. 42.
- Henk, G., and Laube, W. 1967. Effect of plane of feeding on weight gain nutrient intake, energy utilisation and protein deposition in fattening pigs. Eng. Sum. (Ger.) Arch. Tierernahr. 17:393-407.
- Hennig, A., and Kleemann, J. 1967. Deposition of crude protein and energy and nutrient economy in fattening pigs. Eng. Sum. (Ger.) Arch. Tierernahr. 17:511-517.
- Henrickson, R. L., and Smith, R. E. 1967. Effect of rapid processing on the properties of freshly slaughtered pork. Trans. ASAE 10(2):185-187.
- Herak, M., Herak, M., and Loncaric, J. 1967. Changes of transaminase activity in the semen of boars and their relation to sperm motility. Eng. Sum. (Ger.) FortPfl. Besam. Aufzucht. Haust. 3(3/4):238-242.



1967

- Herbst, H. G. 1967. Some conditions of postnatal temperature curves in pigs. Eng. Sum. (Ger.) Mon.H. Vet.Med. 22(18):731-734.
- Hermosura, S. R., and Joaquin, C. B. 1967. Prolificacy of large white and middle white breeds of swine in the Philippines. Phil. J. Vet. Med. 6(1/2):69-74.
- Hermosura, S. R., and Punzalan, E. M. 1967. Determination of liveweight and dressed weight of swine. Phil. J. Vet. Med. 6(1/2):155-162.
- Herrick, J., and Self, H. L. 1967. Evaluation of fertility in the bull and boar. Bailliere, Tindall & Cassell Ltd.
- Hesselholt, M., and Brauner Nielsen, P. 1967. Studies on the genetic relationship between the haemopexin system and other blood group systems in pig. Proc. 10th Europ. Conf. Anim. Blood Grps. Biochem. Polymorph., Paris. 1966:445-448. (ABA 36:583).
- Hetzer, H. O. 1967. Identification and conservation of superior germ plasm. Proc. VIth FAO Inter-American Conf. on 'Animal Production and Health', Gainesville, Fla.
- Hetzer, H. O., and Harvey, W. R. 1967. Selection for high and low fatness in swine. J. Anim. Sci. 26:1244-1251. (ABA 36:1704).
- Hetzer, H. O., Harvey, W. R., and Krehbiel, E. V. 1967. Genetic and environmental trends of certain litter traits in swine. (Abs.) J. Anim. Sci. 26:1464.
- Hicks, A. M. 1967. Physiological responses of growing swine to low temperatures. Diss. Abs. 27(10):3359B.
- Hicks, Barbara Jane. 1967. Genetic load and mortality in partially inbred populations of swine. Ph.D. Thesis, Iowa State U. Libr., Ames. Also Diss. Absts. 28(10)3943B-3944B. (ABA 36:3846).
- Hignett, P. G., and Harvey, M. J. A. 1967. A study of cytogenetics in the pig. PIDA Index of Pig Res., London, Jan. pp. 59.
- Hill, J. E., Leitman, J. D., and Sunderland, J. E. 1967. Thermal conductivity of various meats. Food Technol. 21(8):91-96.
- Hillier, J. C. 1967. Future direction of the swine industry. 30th Annu. Rpt. and Rec. Proc. Conf. Collab., Reg. Swine Breed. Lab., Stillwater, Okla. p. 106.
- Hillier, J. C. 1967. The Hog of the Future: Panel discussion. Part 4. Spec. Wkshp. Sect. 2. Proc. 10th Natl. Pork Indus. Conf. Nov. 9-10, Lincoln.



1967

- Himeno, K., Nagano, R., Mori, T., Mogi, K., and Hosoda, T. 1967. Studies on the hemolytic disease of newborn pigs. II. Natural occurring isoimmunization of sows and hematological findings of pigs affected with hemolytic disease. Eng. Sum. (Jap.) Jap. J. Zootech. Sci. 38(4):167-175.
- Hines, R. H. 1967. The interaction of restricted feed intake and sex on swine performance and carcass quality. Diss. Abs. 28(2):402B-403B (ABA 36:1661).
- Hintz, H. F., Heitman, H. Jr., Booth, A. N., and Gagne, W. E. 1967. Effects of aflatoxin on reproduction in swine. Proc. Soc. Expt. Biol. Med. 126:146-148.
- Hiroshi, M., Anderson, L. L., Hendricks, D. M., and Melampy, R. M. 1967. Progesterone in ovarian venous plasma & corpora lutea of the pig. Endocrinol. 80:240-246.
- Hix, V. M., Pearson, A. M., Reineke, E. P., Gillett, T. A., and Giacoletto, L. J. 1967. Determination of specific gravity of live hogs by suppressed zero techniques. J. Anim. Sci. 26:50-57. (ABA 35:2720).
- Hj van Gils, J., and van Logtestijn, J. G. 1967. Measurement of pH of meat. Aid to estimation of meat quality. Archiv. Lebensmittelhyg. 18(3):49-55.
- Hodgson, R. E. 1967. Current philosophy of research in the Animal Husbandry Research Division. 30th Annu. Rpt. and Rec. Proc. Conf. Collab., Reg. Swine Breed. Lab., Stillwater, Okla. p. 86.
- Hoekstra, W. G., Faltin, E. C., Lin, C. W., Roberts, H. F., and Grummer, R. H. 1967. Zinc deficiency in reproducing gilts fed a diet high in calcium and its effect on tissue zinc and blood serum alkaline phosphatase. J. Anim. Sci. 26:1348-1357.
- Hojny, J., Cavalier, M., Hradecky, J., and Linhart, J. 1967. New blood factors in pigs. Proc. 10th Europ. Conf. Anim. Blood Grps. Biochem. Polymorph. Paris, 1966:151-153. (ABA 36:584).
- Hojny, J., Matousek, J., Schroffel, J., and Baker, L. N. 1967. Comparative pig serum and blood typing tests, Libechov and Ames. Immunogenet. Let. 5:96-98.
- Holden, P., Lucas, E., Speer, V. C., Hays, V. W., and Ewan, R. C. 1967. Long term effects of protein level on swine reproduction. (Abs.) J. Anim. Sci. 26:1478.



1967

- Holme, D. W., and Coey, W. E. 1967. The effects of environmental temperature and method of feeding on the performance and carcass composition of bacon pigs. *Anim. Prod.* 9:209-218. (ABA 35:2721).
- Holme, D. W., and Coey, W. E. 1967. Effects of temperature and feeding methods on bacon pigs. *B.O.C.M. Pig Inf. B.* Jan. 1967. pp. 7-8.
- Holmes, C. W. 1967. Heat losses from young pigs at three environmental temperatures, measured in a direct calorimeter. *Anim. Prod.* 10: 135-147.
- Holmes, C. W., and Coey, W. E. 1967. The effects of environmental temperature and method feeding on the performance and carcass composition of bacon pigs. *Anim. Prod.* 9(2):209-218.
- Holmes, C. W., and Mount, L. E. 1967. Heat loss from groups of growing pigs under various conditions of environmental temperature and air movement. *Anim. Prod.* 9(4):435-452.
- Holmes, W., and Duckworth, J. E. 1967. A comparison of Landrace, Pietrain and Pietrain/Landrace pigs. *PIDA Index of Pig Res.*, Jan. pp. 75-77.
- Holub, A. 1967. Temperature regulation in piglets in the first month of life. *Eng. Sum. (Ger.) Mon.H. Vet. Med.* 22(18):726-730.
- Holub, A. 1967. Weaning of two-day-old piglets. *Eng. Sum. (Cz.) Vet. Med. (Praha)* 40(4):201-206.
- Holzbauer, M., and Newport, H. M. 1967. Evidence for the presence of 16 alpha-hydroxypregn-4-ene-3, 20-dione in adrenal venous blood of young pigs. *J. Physiol.* 191(3):691-697.
- Hood, R. D., Witters, W. L., Foley, C. W., and Erb, R. E. 1967. Free amino acids in porcine spermatozoa. *J. Anim. Sci.* 26:1101-1103. (ABA 36:624).
- Hope, G. T. 1967. Boar performance testing offers valuable aid to pig improvement. *New Zeal. J. Agr.* 115(3):20-23.
- Hopwood, D. 1967. Adrenal medullary basophilia in ox, pig and sheep. A histo-chemical, immunohistochemical and cell fractionation study. *Histochemie*, 11:268.
- Houston, T. W., and Reed, R. 1967. Studies in pork quality. *PIDA Index of Pig Res.* pp. 63.
- Houston, T. W., Reed, R., Kinally, J. S., Todd, P. M. and Whitworth, V. A. 1967. The influence of breed in the intramuscular composition of pig meat. *CICRA Symp.*, Dublin.



1967

- Houston, T. W., and Whitworth, V. A. 1967. The effect of pre-slaughter variables on the postmortem behavior of pork muscle. *PIDA Index of Pig Res.* pp. 65.
- Hovell, F. D. B., Edwards, R., and Boaz, T. G. 1967. Some relationships between K40 content and composition of hams. (Abs.) *Anim. Prod.* 9: 278-279. (ABA 35:2119).
- Howard, A. N., Jennings, I. W., and Gresham, G. A. 1967. Atherosclerosis in pigs obtained from two centres differing in hardness of water supply. *Pathol. Microbiol.* 30(5):676-680.
- Howard, S. B., Moxley, J. E., and Saison, R. 1967. Evaluation of mating systems and boars on a within-litter basis. *Proc. 16th Annu. Meet. Can. Soc. Anim. Prod. U. Manitoba*, June 27-30. p. 25.
- Howe, A., and Thody, A. J. 1967. Histochemical demonstration of oxidative enzymes in the adenohypophysis of the pig, with particular reference to the pars intermedia. *J. Endocrinol.* 39(3):351-359.
- Howe, J. M. 1967. Effects of temperature acclimation on porcine skeletal muscle properties. (Abs.) *Food Trade Rev.* 37(7):43.
- Howe, J. M., Addis, P. B., Howard, R. D., and Judge, M. D. 1967. Induction of rapid postmortem glycolysis in muscle and adrenocortical lipid in pigs reared in controlled environments. (Abs.) *J. Anim. Sci.* 26:895-896.
- Hrdlick, A. J. G., Schwarzman, W. A., Hasel, K., and Zinsser, H. H. 1967. New approaches to reversible seminal diversion. (attempts at reversible male sterilization by injection of silicon rubber (later removable) into the lumen of the vas deferens of pigs and dogs; also a technique to produce a urethral fistula in the perineum. *Fertil. and Steril.* 18:289-296.
- Hristic, V., Hesselholt, M., and Stosic, D. 1967. Serum protein polymorphism in some Yugoslavian pig breeds. *Acta Vet. Scand.* 8(1):43-49. (ABA 35:2746).
- Huber, W. G., and Wallin, R. F. 1967. Pathogenesis of porcine gastric ulcers. *Amer. J. Vet. Res.* 28(126):1455-1459.
- Huber-Wintzer, U. 1967. The effect of gonadotropic substances on the genital tract of young sows. *Eng. Sum. (Ger.) Munich. Universitat. Tierarztliche Fakultat., Inaugural-Dissertation*, 1967, no. 17. (ABA 36:3870).
- Hugh, W. I. 1967. Breeding stock selection for commercial swine production. *Hawaii U. Ext. C.* 422. 24 pp.



1967

- ugh, W. I., and Reimer, D. 1967. Floor space allotment for growing-finishing pigs. (Abs.) J. Anim. Sci. 26:891.
- hunter, R. H. F. 1967. Effect of aging eggs on embryonic survival in pigs. (Abs.) J. Anim. Sci. 26:945.
- hunter, R. H. F. 1967. Polyspermic fertilization in pigs during the luteal phase of the estrous cycle. J. Exp. Zool. 165(3):451-456.
- hunter, R. H. F. 1967. The effects of delayed insemination on fertilization and early cleavage in the pig. J. Reprod. Fertil. 13:133-147. (ABA 35:2763).
- hunter, R. H. F. 1967. Porcine ovulation after injection of human chorionic gonadotrophin. Vet. Rec. 81:21-23. (ABA 36:603).
- Hyldgaard-Jensen, J. 1967. The influence of blood-sampling technique on lactic dehydrogenase (LDH) in pig plasma. Acta Vet. Scand. 8(1):83-85.
- hunter, R. H. F., Polge, C., and Rowson, L. E. A. 1967. The recovery, transfer and survival of blastocysts in pigs. J. Reprod. Fertil. 14(3):501-502. (ABA 36:1727)
- Hyldgaard-Jensen, J., and Jensen, S. E. 1967. Lactic dehydrogenase (LDH) in pigs. II. LDH-isoenzymes in blood plasma and tissues. Eng. Sum. (Da.) Aarsberet. Inst. Sterilitetsforsk. K. Vet.-og Landbohojsk. 1967:109-120.
- Hyldgaard-Jensen, J., Valenta, M., and Moustgaard, J. 1967. Lactic dehydrogenase (LDH) in pigs. III. Polymorphism of LDH-isoenzymes in pigs. Eng. Sum. (Da.) Aarsberet Inst. Sterilitetsforsk K. Vet.-og Landobohojk 1967:121-134.
- Ihssen, R. M. 1967. The influence of development in the pre-testing stage and during the actual test on the results of fattening and carcass performance in the pig, investigated on data from the Radegast Litter Testing Station. Eng. Sum. (Ger.) Kuhn-Archiv. 81:227-272. (ABA 36:2787).
- Ilancic, D. 1967. Physical and chemical methods of the measurement of slaughtering value of live swine. Eng. Sum. (Ser.) Vet. Glasn. 21(8):669-675.
- Ilancic, D., and Zubak, M. 1967. Different histological structure of thyroid gland in different swine breeds. Eng. Sum. (Ser.) Stocarstvo 21(3/4):111-114.



1967

- Ingram, D. L. 1967. Stimulation of cutaneous glands in the pig. J. Compar. Path. 77(1):93-98.
- Ingram, M. 1967. The pale muscle problem in pigs. Fmr. & Stk.Breed. March 28, 1967. pp. 43,45.
- Ingram, R. H., and Bowman, G. H. 1967. An evaluation of two methods for predicting the lean content of hams. Proc. 16th Annu. Meet. Canad. Soc. Anim. Prod., U. Manitoba, June 27-30.
- Ingram, R. H., Forshaw, R. P., Norrish, J. G., Bowman, G. H., and Rennie, J. C. 1967. Effect of fasting before slaughter on tissue shrink in swine. (Abs.) J. Anim. Sci. 26:1471.
- Irfan, M. 1967. The electrophoretic pattern of semen proteins in normal animals. Res. Vet. Sci. 8(2):137-147.
- Isajev, F., Zenisek, Z., and Koucky, M. 1967. The effect of feeding synthetic fat-forming magnesium substances on the digestibility of feed and carcass quality of fattening swine. Eng. Sum. (Cz.) Zivoc. Vyr. 40(2):123-130.
- Isler, G. A. 1967. New techniques speed selection for leaner pork. Ohio Rpt. Res. Dev. Biol. Agr. Home Econ. 52(6):93-94.
- Itoh, H., Hansard, S. L., Glenn, J. C., Hoskins, F. H., and Thrasher, D. M. 1967. Placental transfer of calcium in pregnant sows on normal and limited-calcium rations. J. Anim. Sci. 26:335-340.
- Ittrich, G., and Busch, W. 1967. Investigations concerning the hormonal testicular action of boars. Eng. Sum. (Ger.) FortPfl. Besam. Aufzucht Haust. 3(2):147-152.
- Jackson, W. P., Mayrose, V. B., Jones, H. W., and Foley, C. W. 1967. Artificial insemination and estrus synchronization in swine. Proc. Purdue U. Swine Day. Sept. 8, 1967. Lafayette, Purdue U. Anim. Sci. Dept. Mimeo. AS-373.
- Jacobs, D. E. 1967. Suppression of the peri-parturient egg-rise of the sow. Vet. Rec. 81:198.
- Janicki, M. A., Kortz, J., and Rozyczka, J. 1967. Relationship of color with certain chemical and physical properties of porcine muscle. J. Food Sci. 32(4):375-378.
- Jenkinson, D. M., and Blackburn, P. S. 1967. The distribution of nerves, monoamine oxidase and cholinesterase in the skin of the pig. Res. Vet. Sci. 8:306-312.



1967

- Jenkinson, G. M., Young, L. G., and Ashton, G. C. 1967. Energy metabolism and body composition of weanling pigs. *Canad. J. Anim. Sci.* 47(3):217-226.
- Jensen, A. H. 1967. Developments in environment controlled facilities for swine. *Feedstuffs* 39(37):18-19. Sept.
- Jensen, A. H. 1967. Sow management and reproductive performance. *Proc. Ill. Swine Growers Day, March 21. U. Ill. Anim. Sci. Dept., AS-641A.*
- Jensen, A. H., Becker, D. E., Dziuk, P. J., and Harmon, B. G. 1967. Sow management and reproduction studies. *Proc. Ill. Swine Growers Day, March 21, 1967, Urbana. U. Ill. Anim. Sci. Dept. AS-641A.*
- Jensen, A. H., Gehring, M. M., Becker, D. E., and Harmon, B. G. 1967. Effect of space allowance and tethering on pre-and post-puberal behavior of swine. (Abs.) *J. Anim. Sci.* 26:1467.
- Jensen, E. L., Smith, C., Baker, L. N., and Cox, D. F. 1967. Effects of 16 loci on production traits in pigs. (Abs.) *J. Anim. Sci.* 26:885.
- Jensen, Poul. 1967. Phenotypic and genetic associations among carcass traits of swine. M.S. Thesis, N. C. State U. Libr., Raleigh.
- Jensen, P., Craig, H. B., and Robison, O. W. 1967. Phenotypic and genetic associations among carcass traits of swine. *J. Anim. Sci.* 26:1252-1260. (ABA 36:1705).
- Jensen, P., Craig, H. B., and Robison, O. W. 1967. Genetic variation and covariation among carcass traits of swine. (Abs.) *J. Anim. Sci.* 26:204.
- Jensen, P., Craig, H. B., and Robison, O. W. 1967. Phenotypic and genetic associations among carcass traits of swine. *J. Anim. Sci.* 26:1252-1260.
- Jezkova, D., and Holub, A. 1967. The chemical composition of the body and the dimensions of the digestive tract of sucking pigs in the first month after farrowing. *Eng. Sum. (Ger.) FortPfl. Besam. Aufzucht Haust.* 3(3/4):232-237.
- Jochle, W., Schilling, E., Smidt, D., and Fiedler, E. 1967. Effects of a long-acting and androgen-oestrogen combination on reproductive function in female pigs. *Eng. Sum. (Ger.) Zuchthygiene* 2:122-127. (ABA 36:1728).



1967

- Johnson, L. A., and Gerrits, R. J. 1967. Reproductive performance of boars selected on the basis of backfat thickness. (Abs.) J. Anim. Sci. 26:946.
- Johnson, L. A., Gerrits, R. J., and Young, E. P. 1967. Phospholipid composition of boar spermatozoa and seminal plasma. (Abs.) J. Anim. Sci. 26:946.
- Johnson, L. A., Gerrits, R. J., and Young, E. P. 1967. Fatty acid composition of boar spermatozoa phospholipids. (Abs.) J. Anim. Sci. 26:1499.
- Jones, A. S. 1967. Leg weakness in young pigs. PIDA Index of Pig Res. London, Jan. pp. 30-31.
- Jones, J. E. T. 1967. An intestinal haemorrhage syndrome in pigs. Brit. Vet. J. 123(7):286-294.
- Jones, J. E. T. 1967. Parturition in the sow. Proc. Soc. Vet. Ethology 1(3):10.
- Jones, J. E. T. 1967. An investigation of the causes of mortality and morbidity in sows in a commercial herd. Brit. Vet. J. 123:327-339. (ABA 36:1706).
- Jones, P. H. K. 1967. Isolation, identification and measurement of metabolites of progestins and estrogens in the urine of domestic sows during the estrous cycle. Diss. Abs. 28(6):2305B-2306B.
- Jones, Patricia Halbert Klein. 1967. Isolation, identification, and measurement of metabolites of progestins and estrogens in the urine of domestic sows during the estrus cycle. Ph.D. Thesis, Purdue U. Libr., Lafayette.
- Jorgensen, I., Rowsell, H. C., Hovig, T., Glynn, M. F., Mustard, J. F. 1967. Adenosine diphosphate-induced platelet aggregation and myocardial infarction in swine. Lab. Invest. 17(6):616-644.
- Jovanovic, V., and Stojanovic, Z. 1967. Examination of blood types in two autochthonous types of the pig race "Mangulica". Proc. 10th Europ. Conf. Anim. Blood Grps. Biochem. Polymorph., Paris, 1966:147-149. (ABA 36:585).
- Jovanovic, V., and Stojanovic, Z. 1967. A study of blood groups in the swine breed Mangalitsa. Eng. Sum. (Ser.) Sav. Poljopr. 15(5):459-462.
- Judge, M. D., Cassens, R. G., and Briskey, E. J. 1967. Muscle properties of physically restrained stressor-susceptible and stressor-resistant porcine animals. J. Fd. Sci. 32, 565.



1967

- Jurgens, M. H., Hudman, D. B., Adams, C. H., and Peo, E. R. Jr. 1967. Influence of a dietary supplement of lysine fed at two levels of protein on growth, feed efficiency and carcass characteristics of swine. J. Anim. Sci. 26(2):323-327.
- Juszczak, J., and Nowicki, B. 1967. The influence of inbreeding on the utility value of gilts. Eng. Sum. (Pol.) Zesz. Nauk. Wyzsz. Szkoły. Roln. Wrocławiu. No. 71. Zootech. 14, 45-50. (ABA 36:3847).
- Kaczmarczyk, J. 1967. Influence of the Swedish Landrace on the quality of bacon produced in the region of Rzeszow. Przegl. Hodowl 36(13/14), 11.
- Kahn, R. A., Cooper, R. G., Cornell, C. N., and Muhrer, M. E. 1967. Platelet morphology in bleeder swine. Proc. Mo. Acad. Sci. 4.
- Kalan, E. B., Kraeling, R. R., and Gerrits, R. J. 1967. Isolation of a crystalline polymorphic protein in sow's whey. (Abs.) J. Anim. Sci. 26:876.
- Kalev, G., and Zagorski. 1967. Artificial insemination of pigs in Bulgaria. Vet. Sbirka (Sofiya) 6, 24.
- Kalich, J., Kovacs, F., and Maier, E. 1967. Relationships between factors in the environment colostral milk uptake and piglet mortality. Eng. Sum. (Ger.) Berl. Munch. Tierarztl. Wochenschr. 80(13):250-255.
- Kallweit, E., and Lohse, B. 1967. The suitability of pork of varying quality for the manufacture of ham. Eng. Sum. (Ger.) Fleischwirtschaft 47(6):590-594.
- Kami, T., and Otaishi, S. 1967. A study on the flavor components of meat and meat products. 1. Some volatile constituents of cooked pork. Eng. Sum. (Jap.) Hiroshima U. Fac. Fish. Anim. Husb. J. 7(1):185-192.
- Kao, K. Y. T., Hitt, W. E., and McGavack, T. H. 1967. Connective tissue. XV. Amino acid composition of soluble collagen of pig uterus. Proc. Soc. Expt. Biol. Med. 125(3):734-738.
- Kaplan, F. 1967. The valuation of boar semen by the reduction test. Eng. Sum. (Cz.) Ved. Prace Vyzk. Ust. Chov. Prasat Kostelci Nad Orlici 2(1966):77-82. (ABA 35:3883)
- Kaplan, F. 1967. The ejaculated fraction in relation to the total epididymal spermatozoa of adult boars determined by use of exhaustion tests. Eng. Sum. (Cz.) Ved. Prace Vyzk. Ust. Chov. Prasat Kostelci Nad Orlici 2(1966):83-91. (ABA 35:3884).



1967

- Kaplan, F. 1967. The maximum daily number of ejaculated spermatozoa from adult stud boars. Eng. Sum. (Cz.) Zivoc. Vyr. 12:863-870. (ABA 36:1736).
- Karlinska, K. 1967. Histological and technological characteristics of pig bristles produced in Poland. Eng. Sum. (Pol.) Zesz. Nauk. Wyzsz. Szkoły Roln. Wroclawiu (Zootech.) 14:109-116. (ABA 36:3806)
- Karlovic, M., Zeljko, M., and Fras, A. 1967. Enzootic occurrence of the Glasser disease on Yugoslav swine farms. Eng. Sum. (Ser.) Vet. Glas. 21(8):677-681.
- Kastenschmidt, Lewis L. 1967. Regulation of post-mortem glycolysis in striated muscles. (swine). Ph.D. Thesis, U. Wis. Libr., Madison. Also Diss. Abs. 28(2):477B.
- Kataria, R. S., and Soni, J. L. 1967. Porcine nephroblastoma. Indian Vet. J. 44(7):555-558.
- Kauffman, R. G., and Safanie, A. H. 1967. Influence of porcine muscle structure on its lipid accumulation during growth. J. Fd. Sci. 32:283.
- Kauffman, R. G., Suess, G. G., and Bray, R. W. 1967. Incidence of marbling in porcine and bovine muscle. (Abs.) J. Anim. Sci. 26:896.
- Kauffman, R. G., Norton, H. W., Harmon, B. G., and Breidenstein, B. C. 1967. Growth of the porcine eye lens as an index to chronological age. J. Anim. Sci. 26:31-35. (ABA 35:2706).
- Kauffman, R. G., Norton, H. W., and Breidenstein, B. C. 1967. Eye lens as an index of age in breeds of swine. (Abs.) J. Anim. Sci. 26:896.
- Keating, J. 1967. The most logical pig system in the world. Fmrs' Wkly 67(26):42-47. (ABA 36:1664).
- Kemm, E. H., Pieterse, P. J. S., and Lesch, S. F. 1967. Feed utilization by two extreme types of pig. Eng. Sum. (Afr.) S. Afr. J. Agr. Sci. 10:997-1008. (ABA 36:3807).
- Kemp, J. D., Gammon, D. L., and Moody, W. G. 1967. Effect of fresh ham quality on aged ham quality. Ky. Anim. Sci. Res. Rpt. 170. p. 80.
- Kemp, J. D., Smith, R. H., and Moody, W. G. 1967. Quality of aged ham as affected by alternating aging temperature. (Abs.) Proc. Assoc. South. Agr. Wkrs. 64:185.



1967

- Temp, J. S., Smith, R. H., and Moody, W. G. 1967. Quality of aged hams as affected by alternating aging temperatures. Ky. Anim. Sci. Res. Rpt. 170. p. 81.
- Kenworthy, R., Stubbs, J. M., and Gabrielle Syme. 1967. Ultrastructure of small-intestinal epithelium in weaned and unweaned pigs and pigs with post-weaning diarrhoea. J. Pathol. Bacteriol. 93(2):493-498.
- Kifer, R. R., Smith, P. Jr., and Young, E. P. 1967. Fatty acid composition of swine (*sus domesticus*) tissue. 1. Effect of dietary incorporation of menhaden fish oil. (Abs.) J. Anim. Sci. 26:896-897.
- Kifer, R. R., Smith, P. Jr., and Young, E. P. 1967. Fatty acid composition of swine (*sus domesticus*) tissue. 2. Relation of marine polyunsaturated fatty acids fed and deposited to off "Fishy" flavor. (Abs.) J. Anim. Sci. 26:897.
- Kim, Y. B., Bradley, S. G., and Watson, D. W. 1967. Ontogeny of the immune response. IV. The role of antigen elimination in the true primary immune response in germfree colostrum-deprived piglets. J. Immunol. 99(2):320-326.
- King, G. J., and MacPherson, J. W. 1967. Boar semen studies. II. Laboratory and fertility results of a method for deep freezing. Canad. J. Comp. Med. 50:46-47. (ABA 35:2777).
- King, J. 1967. Tomorrow's markets may need new-look breeds. Pig Fmg. 15(1):75, 77. Jan.
- King, J. O. L., Ewbank, R., Bryant, M. J. 1967. A study of the social behaviour within groups of growing pigs with special reference to the development of tail-biting. PIDA Index of Pig Res. pp. 67.
- King, J. W. B. 1967. Developments in pig breeding. Brit. Cattle Breed. Cl. Dig. 23:89.
- King, J. W. B. 1967. Pig breeding research. Rep. Proc. 9th Internatl. Cong. Anim. Prod. Edinburgh 1966, p. 9.
- King, J. W. B. 1967. Crossbreeding experiments. PIDA Index of Pig Res. pp. 1.
- King, J. W. B. 1967. Tomorrow's markets may need new-look breeds. Pig Fmg. Jan. pp. 75-77.
- King, J. W. B. and Strang, G. S. 1967. A study of the genetic aspects of litter productivity. PIDA Index of Pig Res. pp. 1,2.



1967

- Kirkpatrick, R. L. 1967. Endocrine mechanisms involved in the stimulation of ovarian activity by high nutrient energy intake in the gilt. Dis Abs. 28(3):1140B.
- Kirkpatrick, R. L. 1967. Ovarian and pituitary gland changes in gilts on two nutrient energy levels. J. Anim. Sci. 26:358-364.
- Kirkpatrick, R. L., Howland, B. E., First, N. L., and Casida, L. E. 1967. Some characteristics associated with feed and breed differences in ovulation rate in the gilt. J. Anim. Sci. 26:188-192. (ABA 35:2764)
- Kitchell, A. G. 1967. Microbiology of pre-packed meats. Inst. Meat B. (55),6.
- Kjellberg, B., and Karlsson, B. W. 1967. Comparative analyses of lactic and malic dehydrogenases and their multiple molecular forms in milk from various animal species and man. Comp. Biochem. Physiol. 22, 397.
- Kliesch, J., and Horst, P. 1967. On the problem of atrophic rhinitis and its diagnosis in live pigs by X-rays. Eng. Sum. (Ger.) Zucht.K. 39:126-133. (ABA 36:586).
- Kline, E. A., and Christian, L. L. 1967. Contribution of conformation of swine to carcass desirability. (Abs.) J. Anim. Sci. 26:1471.
- Kline, R. D., Chaney, C. H., and Kemp, J. D. 1967. Influence of protein level, sex and sire on performance and carcass characteristics of swine. Prog. Rpt. Ky. Agr. Expt. Sta. 170:51-52. (ABA 36:547)
- Kline, R. D., Chaney, C. H., and Waddill, D. G. 1967. Effect of implanting stilbestrol in pigs castrated at birth on carcass characteristics and performance. Prog. Rpt. Ky. Agr. Expt. Sta. 170:55-56. (ABA 36:548).
- Klusacek, J. 1967. Investigation of material for family and line breeding in pig breeding. Eng. Sum. (Cz.) Zivoc. Vyr. 40(7):495-502.
- Knaggs, G. S. 1967. Biological half-life of intravenously injected oxytocin in the circulation of the sow. J. Endocrinol. 37:229-230.
- Knifton, A. 1967. Effects of posterior pituitary hormones on isometric tension and isotonic shortening of the pig myometrium. J. Pharm. Pharmacol. 19:439-444.



1967

- Kojima, Y., Iida, I., Bamba, K., and Kobayashi, S. 1967. Studies on deep-freezing of boar semen. IV. Additional effects of DMSO as a protective agent. Eng. Sum. (Jap.) Jap. J. Anim. Reprod. 13: 149-155. (ABA 36:2857).
- Konishi, S., and Bankowski, R. A. 1967. Use of fluorescein-labeled antibody for rapid diagnosis of transmissible gastroenteritis in experimentally infected pigs. Amer. J. Vet. Res. 28(125):937-942.
- Kopecky, O. 1967. The effect of breed and sex on the fattening ability and carcass value of pigs. Eng. Sum. (Cz.) Ved. Prace Vyzk. Ust. Chov. Prasat Kostelci nad Orlici 2(1966):35-48. (ABA 35:3777).
- Kopecky, O., and Pasicna, N. 1967. On the determination of the dimensions and cross-section area through the longissimus dorsi and of the fat thickness above the muscle in pigs. Ved. Prace Vyzk. Ust. Chov. Prasat Kostelec n. Orli. 2(1966) 49.
- Kopecky, O., and Pasicna, N. 1967. The ultrasonic measurement of backfat thickness in selecting for meat type. Eng. Sum. (Cz.) Zivoc. Vyr. 12:541-548. (ABA 36:1665).
- Kopecky, O., and Pasicna, N. 1967. The determination of measurements and area of a transverse section of the longissimus dorsi muscle and the fat over it in pigs. Eng. Sum. (Cz.) Ved. Pr. Vyzk. Ust. Chov. Prasat Kostelci nad Orlici 2(1966):49-57. (ABA 35:3778).
- Kornegay, E. T. 1967. Effect of exercise and tranquilization of pigs on blood sampling. (Abs.) J. Anim. Sci. 26:908.
- Kornegay, E. T. 1967. Daily and twice daily repeated blood sampling in weanling pigs. Amer. J. Vet. Res. 28(124):839-844.
- Kostyra, T., Duniec, H., and Rozycki, M. 1967. Results of the evaluation of boars on the basis of investigations on their progeny at pig performance testing stations of the Polish Zootechnical Institute in 1966. Eng. Sum. (Pol.) Wydawn. Wlasne Inst. Zootech. 216:158 pp. (ABA 37:3856).
- Kotarbinska, M., and Kielanowski, J. 1967. Energy balance studies with growing pigs by the comparative slaughter technique. Proc. 4th EAAP Symp. on 'Energy Metabolism', Jablonna.
- Kovacs, F., Rafai, P., and Sallai, J. 1967. The effect of certain environmental factors on the health and production of pigs. I. The effect of the temperature on the organism of newborn and young piglets. Eng. Sum. (Hu.) Magyar Allat. Lapja 22(10):449-454.



1967

- Kovesdy, J. 1967. Zootechnical and economic problems related to farrowing during fattening. Eng. Sum. (Hu.) Allattenyesztes 16(1): 37-50. (ABA 35:3780).
- Kozlovskii, V. G., and Smirnov, N. P. 1967. Linebreeding with pigs and the use of inbreeding. Eng. Sum. (Russ.) Genetika 1967(10): 128-141. (ABA 36:1707).
- Kraeling, R. R., and Gerrits, R. J. 1967. Polymorphism of a crystallin protein in sow's whey. (Abs.) J. Anim. Sci. 26:877.
- Kraeling, R. R., Gerrits, R. J., and Young, E. P. 1967. Transferrin and pre-albumin polymorphisms in swine selected for backfat thickness. J. Anim. Sci. 26:877.
- Kramer, T. T., and Nderito, P. C. 1967. Experimental Escherichia coli diarrhea in hysterectomy-derived, one day-old, fasting pigs. Amer. J. Vet. Res. 28(125):959-964.
- Kratzer, D. D., and Cox, D. F. 1967. Effects of avoidance conditioning in pigs. (Abs.) J. Anim. Sci. 26:887.
- Kraus, D. 1967. Diagnosis of pregnancy in pigs (review). Eng. Sum. (Rum.) Stud. Inform Vet. 1:48p. (ABA 37:3886)
- Krehbiel, E. V., Hetzer, H. O., Flower, A. E., Harvey, W. R., and Swiger, L. A. 1967. Selection for specific combining ability in swine. Litter size and weight. (Abs.) J. Anim. Sci. 26:1465.
- Kresan, J. 1967. Quantitative morphological comparisons of the carcass of Improved White, Landrace, Black Spotted, Cornwall and Pietrain pigs. Eng. Sum. (Cz.) Zivoc. Vyroba 12(10):787-794. (ABA 36:1666).
- Kropf, D. H. 1967. The Hog of the Future: Panel discussion. Pt. 2. Spec. Wkshp. Sect. 2. Proc. 10th Natl. Pork Indus. Conf. Nov. 9-10, Lincoln.
- Krzywicki, K., and Ratcliff, P. W. 1967. The phospholipids of pork muscle, and their relation to the post-mortem rate of glycolysis. J. Sci. Food Agr. 18:252-257.
- Kvapil, O. 1967. The use of Landrace boars for commercial crossing with Improved White pigs. Eng. Sum. (Cz.) Ved. Prace Vyzk. Ust. Chov Prasat Kostelci nad Orlici, 2(1966):25-34. (ABA 35:3784).
- Kvapil, O. 1967. The applicability of the Black Spotted Prestice boars to commercial crossing. Zivoc. Vyr. 12, 607.



1967

- vapil, O., and Cvejn, J. 1967. The use of Landrace pigs for crossing with Czechoslovak Improved Whites. Eng. Sum. (Cz.) Zivoc. Vyroba 12:503-510. (ABA 36:1669).
- adan, P. E., Belkina, N. N., Stepanov, V. I., and Balan, Ju. V. 1967. Principles of growth of muscle and fatty tissues in pigs of the planned breeds. Eng. Sum. (Russ). Vest. SelHoz. Nauki, Mosk. 12(4):58-64. (ABA 35:3812)
- laing, J. A., and Phillippo, M. 1967. A study of the lesions of natural and one type of experimentally induced embryonic mortality in pigs. PIDA Index of Pig Res. pp. 70-71.
- lamming, G. E., and Crighton, D. B. 1967. Partial early weaning and lactation anoestrus in the sow. PIDA Index of Pig Res. pp. 88-89.
- lamming, G. E., and Haynes, N. B. 1967. Detection of ovulation in the sow. PIDA Index of Pig Res. pp. 88.
- lamming, G. E., and Scofield, A. M. 1967. Studies of embryonic and foetal mortality. PIDA Index of Pig Res. London, Jan. pp. 92-93.
- lamming, G. E., and Swan, H. 1967. Studies on the preparation of antisera to porcine follicle stimulating hormone. PIDA Index of Pig Res. London, Jan. pp. 89-90.
- Lannek, N. 1967. Two forms of muscular degeneration in pigs. Eng. Sum. (Ger.) Deut. Tierarztl. WchnSchr. 74(13):321-324.
- Lasley, E. L. 1967. Optimum Programs for testing. Testing Wkshp. 7. Proc. 10th Natl. Pork Indus. Conf. Nov. 9-10. Lincoln.
- Lasley, E. L. 1967. The Hog of the Future: Panel discussion. Pt. 3. Spec. Wkshp. Sect. 2. Proc. 10th Natl. Pork Indus. Conf. Nov. 9-10. Lincoln.
- Lasley, J. F. 1967. Pork quality. Duroc News 41(7):200-208. July.
- Lauprecht, E., Flock, D., and Hinkelmann, K. 1967. Diallel matings in the pig. Eng. Sum. (Ger.) Z. Tierzucht. ZuchtBiol. 83(2):178-189. (ABA 35:2749).
- Lauprecht, E., Schulze, W., and Bollwahn, W. 1967. Research on the occurrence of malformations and diseases of joints in the swine. Eng. Sum. (Ger.) Z. Tierzucht. Zuchtungsbiol. 83(4):297-311.
- Lauprecht, E., Schutzbar, W., and Flock, D. 1967. Investigations on the heritability of fat and muscle depth of young boars measured ultrasonically. Eng. Sum. (Ger.) Z. Tierzucht. Zucht.Biol. 84: 80-95. (ABA 36:2826).



1967

- Lawrence, Jerry Allen. 1967. A study of factors associated with charges in boar semen and a photoelectric method for the determination of spermatozoa concentration. M.S. Thesis, Okla. State U. Libr., Stillwater.
- Lawrie, R. A. 1967. Factors modifying meat tenderness. S.C.I. Monograph No. 27, 'Rheology and texture of foods'.
- Lawrie, R. A. 1967. The reaction of pork muscles to accelerated freeze drying... PIDA Index of Pig Res. London, Jan. pp. 92.
- Laws, L. 1967. Melioidosis in animals in North Queensland. VI. Serological methods of diagnosis in goats, pigs, cattle, horses and man. Queensland J. Agr. Anim. Sci. 24:223.
- Lazerevic, L. 1967. Effect of sex and castration on growth, food utilisation and carcass characters in pigs. Eng. Sum. (Serb.) Zborn. Rad. Poljopr. Fak. U. Beogradu. 15(556):12 pp. (ABA 37:2700)
- Lee, C., McBee, J. L., Jr., and Horvath, D. J. 1967. Dietary protein level and swine carcass traits. J. Anim. Sci. 26:490-494.
- Leidl, W., and Biegert, W. 1967. A suction appliance for biopsy of vaginal epithelium to diagnose pregnancy in pigs. Eng. Sum. (Ger.) Zuchthyg. Fort. Pfl.Stor. Besam. Haust. (ABA 35:2765).
- Lewis, J. E. Jr., Curtis, S. E., and Garwood, V. A. 1967. Empirical study of relation of swine gestation length and weather. (Abs.) J. Anim. Sci. 26:1463.
- Lewis, P. K., Brown, C. J., and Heck, M. C. 1967. Effect of ante-mortem stress and freezing immediately after slaughter on certain organoleptic and chemical characteristics of pork. J. Anim. Sci. 26: 1276-1282.
- Linke, H. 1967. The connective tissue content in the carcasses of pigs and cattle. 1. Introduction and methods. Eng. Sum. (Ger.) Fleischwirtschaft 47(5):475-479.
- Linke, H., Fleischmann, O., Woltersdorf, W., and Wirth, F. 1967. The connective tissue content of pork and beef carcasses. III. The meaning of "meat as grown". Eng. Sum. (Ger.) Fleischwirtschaft 47(7):744-752, 754.
- Linke, H., Wirth, F., and Fleischmann, O. 1967. The connective tissue content in pork and beef carcasses. IV. The meaning of "meat containing little sinew." Eng. Sum. (Ger.) Fleischwirtschaft 47(8):829-836.



1967

- inzell, J. L., Mephram, T. B., Annison, E. F., and West, C. E. 1967. Mammary metabolism in the lactating sow. *Biochem. J.* 103(2):42.
- ister, D., and McCance, R. A. 1967. Severe undernutrition in growing and adult animals. 17. The ultimate results of rehabilitation: pigs. *Brit. J. Nutr.* 21(4):787-799.
- ister, D., Sair, R. A., Will, J. A., Schmidt, G. R., Cassens, R. G., Hoekstra, W. G., and Briskey, E. J. 1967. Physiology of the pig in relation to the development of pale, soft exudative (PSE) muscle post-mortem. I. The effect of breathing oxygen and nitrogen before death. (Abs.) *J. Anim. Sci.* 26:898.
- ister, D., Sair, R. A., Moody, W. G., Cassens, R. G., Hoekstra, W. G., and Briskey, E. J. 1967. Physiology of the pig in relation to the development of pale, soft, exudative (PSE) muscle postmortem. II. The effect of D-tubocurarine chloride. (Abs.) *J. Anim. Sci.* 26:898.
- ittledike, E. T. 1967. A method for collecting porcine parathyroid glands at slaughtering plants. *Amer. J. Vet. Res.* 128(127):1905-1907.
- ivingston, D. M. S., and Elsley, F. W. 1967. The incidence of taint in entire male pigs. *PIDA Index of Pig Res.* pp. 30-31.
- ivingston, H. R., and Robertson, A. M. 1967. A pig sweat-house compared with an insulated fan ventilated house. *Internatl. J. Farm Bldgs. Res.* 2(1), 2.
- loyd, D. H. 1967. A study to improve efficiency of labour use in piggeries by improved piggery design and layout and better working methods. *PIDA Index of Pig Res.* Jan. pp. 95.
- odge, G. A. and Cooper, K. J. 1967. The influence of nutrition on ovulation rate. *PIDA Proc. Symp. on 'The nutrition of sows'*, Nottingham, p. 11.
- odge, G. A., and Day, N. 1967. Sex effects on the performance of lightweight pork pigs. *U. Nottingham, Sch. Agr. Rpt.* 1966-67, 62.
- Loen, A. Van and Molenaar, B. A. J. 1967. Behavioral study in baby pigs. Methodology in measuring the evolution of teat order. *Eng. Sum. (Du.) Tijdschr. Diergeneesk.* 92(5):297-307.
- Loftsgaard, G., Briskey, E. J., and Olson, C. 1967. Use of concentrated extracts for microbiological assays of penicillin residues. *Amer. J. Vet. Res.* 28, 167.



1967

- Logtestijn, J. G. Van, and Sybesma, W. 1967. Muscle and meat degeneration in pigs. Eng. Sum. (Ger.) Deut. Tierarztl. Wchn.Schr. 74(15); 377-380.
- Lohman, T. G. 1967. Distribution of potassium, as determined by whole-body K<sup>40</sup> counting, and its relation to carcass composition in steers. Diss. Abs. 28(4):1297B.
- Lohse, B., Kallweit, E., and Schroder, L. A. J. 1967. Guides to the evaluation of carcass quality in pigs weighing 110 kg. Eng. Sum. (Ger.) Fleischwirtschaft 47(12):1360-1363. (ABA 36:2791).
- Long, C. H. 1967. Factors which influence gastrointestinal absorption in the immediate post-natal period. Diss. Abs. 27(8):2558B.
- Long, J. F., Koestner, A., and Liss, L. 1967. Experimental porcine polioencephalomyelitis in germfree pigs. Path. Vet. 4(2):186.
- Longenecker, D. E., Waite, A. B., and Day, B. N. 1967. Similarity in the number of corpora lutea during two stages of pregnancy in swine. (Abs.) J. Anim. Sci. 26:1497.
- Looker, M. 1967. Ultrasonics- a boon to breeders. Pig Fmg. 15(10): 44-45, 47.
- Lorant, B., and Hagony, L. P. 1967. Comparative chemical, differential thermoanalytical and gas chromatographic investigation of tallows and swine fats of various origins. Eng. Sum. (Ger.) Seifen-Ole-Fette-Wachse 93(20):745-749.
- Losonczy, S. 1967. Nature and significance of the so-called exudative (watery) hog's flesh. Eng. Sum. (Hu.) Husipar 16(1):11-17.
- Louca, A., and Robison, O. W. 1967. Components of variance and covariance in purebred and crossbred swine. J. Anim. Sci. 26:267-273. (ABA 35:3841).
- Lucas, Ernest William. 1967. The effect of dietary protein level on the reproductive performance of sows. M.S. Thesis, Iowa State U. Libr., Ames.
- Lucas, I. A. M., and Chamberlain, A. G. 1967. New diets for progeny testing. PIDA Index of Pig Res., Jan. pp. 34-35.
- Lucas, I. A. M., and Miles, K. L. 1967. Comparison of four diets with those given in the National Pig Progeny Test Stations. (Abs.) Anim. Prod. 9:273.



1967

- icas, I. A. M., and Perry, G. C. 1967. The importance of passive immunity in piglets and factors governing the acquisition of resistance to disease. Dept. of Agr. U. Col. N. Wales, Bangor, Wales. PIDA, Index of Pig Res. London, Jan. pp. 36.
- icas, L. E. 1967. Ultrasonics a tool in leaner, quality pork needed. U. Nebr. Anim. Sci. Dept. Swine Prog. Rpt. 378. pp. 11-12.
- icas, L. E., Svajgr, A. J., and Peo, E. R. Jr., 1967. Effect of hormone combination and protein level on performance and carcass traits in market pigs. (Abs.) J. Anim. Sci. 26:908-909.
- udwick, T. M., Wilson, R. F., and Pounden, W. D. 1967. Reproduction in swine. Ohio Agr. Res. Dev. Ctr. Wooster. Anim. Sci. Res. Rpt. May 1967. pp. 44-45.
- ukens, J. N., Cartwright, G. E., and Wintrobe, M. M. 1967. Plasma iron in pyridoxine-deficient swine. Proc. Soc. Expt. Biol. Med. 126(3): 654-657.
- und, S. A., and Pedersen, O. K. 1967. A new automatic instrument for measuring irregular surfaces, especially on pork chops. Eng. Sum. (Ger.) Fleischwirtschaft 47(3):263-264.
- ush, J. L. 1967. Ways of utilizing heterosis in animal breeding. Internatl. Symp. on Genetics, held in Piracicaba, Sao Paulo, Brazil, July 1966. Cienc. Cult. S. Paulo 19:221. (ABA 36:2184).
- ush, J. L. 1967. Changes in the objectives of the Laboratory over the years. 30th Annu. Rpt. and Rec. Proc. Conf. Collab., Reg. Swine Breed. Lab., Stillwater, Okla. pp. 70.
- ush, J. L. 1967. What I would still like to know about population genetics. 19th Annu. Rpt. NC-1 & Proc. Ann. Meet. Tech. Comm. Aug. 21-23, 1967. Wooster, Ohio pp. 34-40.
- ynch, G. 1967. Ultrasonic and direct measurement of backfat thickness in bacon pigs. Irel. J. Agr. Res. 6:41-47. (ABA 35:3787).
- acDougall, D. B., and Disney, J. C. 1967. Quality characteristics of pork and special reference to Pietrain, Pietrain x Landrace and Landrace pigs at different weights. J. Food Technol. 2:285.
- acIver, R. M. 1967. A controlled programme of selection for lean meat in a closed herd. PIDA Index of Pig Res. pp. 36-37.
- adigan, J. J., and Abraham, G. L. 1967. Determining pork belly transit and skinning spreads. Natl. Provis. 157(11):82-86.



1967

- Majerciak, P. 1967. Comparison of measurement by a lean meter and ruler with actual backfat measurements as a basis for selection. Anim. Breed. Abs. 35:111.
- Majerciak, P. 1967. The effect of the live weight of pigs on carcass characters and the economics of fattening. (Cz.) Ved. Prace Vysk. Ust. Zivoc. Vyroby Nitre 5:159-177. (ABA 36:1672).
- Majstruk-Majewska, T. 1967. Histochemistry of some lipids in the course of myelinization of the spinal cord in the domestic pigs (embryo). Eng. Sum. (Pol.) Ann. U. M. Curie-Sklodowska Sect. DD 21:1-16.
- Maks, H. F. 1967. Pig industry statistics. PIDA London, Mar. (Mimeo).
- Mandigo, R. W. 1967. How soon accelerated pork processing? Meat 33(8):25-27.
- Mandigo, Roger Wellington. 1967. The influence of pre-chill processing on pork products. Ph.D. Thesis, Okla. State U. Libr., Stillwater.
- Mandigo, R. W. 1967. Pale, Soft pork. U. Nebr. Anim. Sci. Dept. Swine Prog. Rpt. 378. pp. 3-4.
- Mandigo, R. W., and Henrickson, R. L. 1967. The influence of pre-chill processing techniques on bacon. Food Technol. 21(9):98.
- Mangold, D. W., Hazen, T. E., and Hays, V. W. 1967. Effect of air temperature on growing-finishing swine. Trans. A.S.A.E. 10:370-375, 377.
- Manning, T. W. 1967. Performance of the hog marketing system in Alberta. Alberta U. Dept. Ext. Agr. Econ. Res. B. 4. 26 p.
- Marchut, M., and Rembiesa, R. 1967. In vitro metabolism of progesterone  $4^{14}\text{C}$  by the neonatal pig adrenal tissue. Endocrinol. Expt. 1(3):145-52.
- Marrable, A. W., and Ashdown, R. R. 1967. Quantitative observations on pig embryos of known ages. J. Agr. Sci. 69:443-447.
- Marre, H., and Roselius, R. 1967. A new apparatus for deep freezing sperm. Eng. Sum. (Ger.) Deut. Tierarztl. Wchn.Schr. 74(3):60-62.
- Marshall, J. E., Watson, J. H., and Slattey, A. 1967. Prediction of eye muscle area from probe measurements on carcasses of bacon pigs. (Abs.) Anim. Prod. 9:278. (ABA 35:2119).



1967

- Martin, A. H., and Doornenbal, H. 1967. Some effects of variation in experiments involving chemical and physical analyses of half and whole swine carcasses. *Canad. J. Anim. Sci.* 47(1):17-22. (ABA 35:3789).
- Martin, A. H., and Fredeen, H. T. 1967. Relative merit of sib versus own performance in selection for lean meat production in swine. *Canad. J. Anim. Sci.* 47:171-179. (ABA 36:2828).
- Martin, Charles Everett. 1967. A clinical and pathological study of agalactia in sows. M.S. Thesis, Purdue U. Libr., Lafayette.
- Martin, C. E. Hooper, B. E., Armstrong, C. H. and Amstutz, H. 1967. Clinical and pathologic study of the mastitis-metritis-agalactia syndrome of sows. *J. Amer. Vet. Med. Assoc.* 151:1629-1634.
- Martin, T., Stant, E. G. Jr., Kessler, W. V., Judge, M. D., and Christian, J. E. 1967. Association of body potassium, chemical composition and carcass measurements with fat: lean composition determined by physical separation. *Proc. Body Comp. Conf, NAS-NRC, Washington, Ann. N.Y. Acad. Sci.*
- Martin, T. G., Stant, E. G. Jr., Kessler, W. V. and Parker, H. E. 1967. Associations between chemical and counter estimates of potassium content. *Proc. Body Comp. Conf., NAS-NRC, Washington, Ann. N. Y. Acad. Sci.*
- Masek, N. 1967. The content of inorganic substances in boar semen in relation to ejaculation frequency and ejaculate fractions. *Eng. Sum. (Cz.) Zivoc. Vyr.* 12:855-862. (ABA 36:1742).
- Masincupp, F. B., and Meacham, T. N. 1967. Reproductive performance of gilts reared on concrete versus open lot rearing. *Va. Polytech. Inst. Lvstk. Res. Rpt.* 122:41-42. (ABA 37:706).
- Mason, J. V., and Sewell, R. F. 1967. Influence of diet on the fatty acid composition of swine tissues. *J. Anim. Sci.* 26:1342-1347.
- Masuda, H., Anderson, L. L., Henricks, D. M., and Melampy, R. M. 1967. Progesterone in ovarian venous plasma and corpora lutea of the pig. *Endocrinol.* 80(2):240-246.
- Mathur, B. S. 1967. Synchronization of estrus for profitable farm production (pigs). *Rajasthan Vet.* 2(1):15-20.
- Mathur, L. B. 1967. Crossbreeding in reference to swine production. *Rajasthan Vet.* 2(1):21-27. (ABA 36:1673).



1967

- Matousek, J., Dostal, J., and Fulka, J. 1967. Antigenicity and polymorphism of the seminal vesicle fluid in boars. Proc. 10th Europ. Conf. on Anim. Blood Groups and Biochem. Polymorphisms, Paris. pp. 523-531.
- Matousek, J., and Schroffel, J. 1967. Blood group substances A, Na and polymorphic traits in serum and follicular fluid of ovaries of sows. Eng. Sum. (Ger.) FortPfl. Besam. Aufzucht Haust. 3(2):118-123.
- Matthaeus, W. 1967. Protein changes and immuno-electrophoretic studies in a swine fever outbreak. Eng. Sum. (Ger.) Zent.B1. Vet. Med. Reihe B. 14(5):467-482.
- Matthiessen, M. E. 1967. Comparative enzyme histochemical studies on the development of teeth in man, pig, and mouse. Alkaline phosphatase, acid phosphatase, and unspecific aesterase. Acta. Anat. 66(3):375-386.
- Maxson, Dale W. 1967. Influence of various ratios of raw and gelatinized corn, and oat components on the incidence of esophagogastric ulcers in swine. M.S. Thesis, Purdue U. Libr., Lafayette.
- Maxwell, C. V. Jr., Reese, N. A., Muggenburg, B. A., Reimann, E. M., Kowalczyk, T., Grummer, R. H., and Hoekstra, W. G. 1967. Effect of oat hulls and other oat fractions on the development of gastric ulcers in swine. J. Anim. Sci. 26:1312-1318.
- Maxwell, C. V., Reimann, E. M., Hoekstra, W. G., Kowalczyk, T., and Grummer, R. H. 1967. Effect of dietary particle size on gastric pH and pepsin activity of fistulated swine. (Abs.) J. Anim. Sci. 26:1498.
- Mazaraki, J. 1967. The selection index of meat swine. Eng. Sum. (Ger.) Arch. Tierzucht 10(1):65-72. (ABA 35:3843).
- McCance, R. A., and Wilkinson, A. W. 1967. Experimental resection of the intestine in newborn pigs. Brit. J. Nutr. 21(3):731-740.
- McCann, L. I. 1967. The effects of early experience and paternal irradiation upon avoidance learning, weight gain, and open field behavior in swine. Diss. Abs. 27(9):3313B-3314B.
- McCarty, J. W., and Seerley, R. W. 1967. Reproductive performance of gilts and sows fed daily, twice weekly or weekly during gestation. S. Dak. Agr. Expt. Sta. AS. Mimeo Ser. 67-36.



1967

- Caulley, D. F., Fazio, T., Howard, J. W., Diciurcio, F. M., and Ives, J. 1967. The multidetermination of antioxidants in lard. Assoc. Official Analytical Chem. J. 50(2):243-250.
- Clain, P. E., Pearson, A. M., Fennell, R. A., and Merkel, R. A. 1967. Histochemistry of normal and PSE porcine connective tissue. (Abs.) J. Anim. Sci. 26:898-899.
- Fee, A. F., and Eblen, J. R. 1967. Testicular development in miniature swine. J. Anim. Sci. 26:772-776. (ABA 36:605).
- Fee, A. F., and Banner, M. W. 1967. Morphological changes in swine leucocytes during in vitro culture. (Abs.) J. Anim. Sci. 26:887.
- Feely, R. A. 1967. Chromosome abnormalities in early embryos of the pig. J. Reprod. Fertil. 13(3):579-581. (ABA 35:3842).
- Feely, R. A., and Hare, W. C. D., and Biggers, J. D. 1967. Chromosome studies in 14 cases of intersex in domestic mammals. Cytogenet. 6:242-253.
- Gloughlin, P. 1967. Sire by sex interactions in boar proving. (Abs.) Anim. Prod. 9:279. (ABA 35:2119).
- Intosh, E. N. 1967. Post-mortem changes in protein extractability in beef, pork, and chicken muscle. J. Food Sci. 32(2):208-209.
- Loughlin, J. V. 1967. Protein composition of porcine skeletal muscle. (Abs.) Proc. 7th Internatl. Cong. Biochem. Tokyo.
- Veigh, C. J. D., Meacham, T. N., Brooks, C. C., and Thomas, H. R. 1967. Influence of litter weaning age on subsequent reproductive behavior in the sow. (Abs.) Va. J. Sci. 18:142. (ABA 36:3269).
- Meacham, G., and Illman, O. 1967. Articular cartilage degeneration in hamsters and in pigs. Z. Vers.Tierk. 9:33-46.
- Deade, R. J. 1967. Diet of the young pig and carcass characteristics. Proc. Minn. Nutr. Conf. p. 6.
- Deade, R. J. 1967. Influence of kind and form of starter on rate and efficiency of gain of pigs weaned at an early age. Feedstuffs, 39(39):18, 30 Sept.
- Deade, R. J. 1967. Effect of the young pig's diet. Influence of dietary regimen and performance of pigs to eight or nine weeks of age on subsequent rate and efficiency of gain and on carcass characteristics. Feedstuffs, 39(45):46. 11 Nov.



1967

- Mebus, C. A. 1967. Congenital tremors of young pigs. U. Nebr. Swine Prog. Rpt. 378. pp. 7-8.
- Meding, J. H., and Rasbech, N. O. 1967. Investigations on artificial insemination in pig breeding. IV. A report from the Hatting Boar Testing Station. Eng. Sum. (Dan.) Aarsberet. Inst. Sterilitetsforsl. K. Vet.-og Landbohojsk. 1967:231-241. (ABA 36:1743).
- Megibben, R. W., Chaney, C. H., and Waddill, D. G. 1967. Factors affecting serum cholesterol levels in swine. Ky. Anim. Sci. Res. Rpt. 170. p. 47.
- Megibben, R. W., Waddill, D. G., and Chaney, C. H. 1967. Effect of feeding interval on cholesterol and blood sugar levels of swine. (Abs.) J. Anim. Sci. 26:215.
- Merkel, J. A., and Hazen, T. E. 1967. Zone cooling for lactating sows. Trans. A.S.A.E. 10:444-447.
- Meyer, H. 1967. Hereditary defects. Frequency and distribution in domestic animal populations. Deut. Tierarztl. Wchn.Schr. 74(5): 109-112. Eng. Sum. (Ger.)
- Miller, E. R., Ullrey, D. E., and Luecke, R. W. 1967. Relationships of growth, food intake and serum and bone measures in the baby pig. Proc. Internatl. Cong. Nutr. 7(1):310-315.
- Miller, E. R., Ullrey, D. E., Schmidt, D. A., Luecke, R. W., and Hoefer, J. A. 1967. Effects of nutrient deficiencies upon organ weights of the baby pig. J. Anim. Sci. 26:1046-1050.
- Mills, J. B. 1967. C-terminal sequence of pig growth hormone. Nature 213(5076)631-632.
- Milojic, M., and Simovic, B. 1967. Study on fertility in three consecutive generations of sows. Eng. Sum. (Ser.) Zborn. Rad. Poljopr. Fak. U. Beogradu. 15(453) 10 pp.
- Milosavljevic, S., and Sovljanski, B. 1967. Effect of season of prenatal losses and weight of live newborn piglets. Eng. Sum. (Ser.) Acta. Vet. (Belgrade) 17:155-159. (ABA 37:1703).
- Mitic, N., Sreckovic, A., and Gajic, Z. 1967. The effect of the level of feeding during pregnancy on the weight and reproductive performance of gilts. Eng. Sum. (Ser.) Sav. Poljopr. 15(2):131-142.



1967

- Polnar, S., Vemmer, H., Frick, R., and Lenkeit, W. 1967. The course of specific <sup>45</sup>Ca activity in feces and urine with Cafree nutrition according to investigations with growing swine. Eng. Sum. (Ger.) Z. Tierphysiol. Tierernahr. U. Futtermittelk. 22(5):290-297.
- Polnar, S., Lantzsich, H. J., Perl, H., Gutte, J. O., and Lenkeit, W. 1967. Investigations on mineral excretion with mineral-free feeding of growing swine. Eng. Sum. (Ger.) Z. Tierphysiol. Tierernahr. U. Futtermittelk. 22(5):313-320.
- Body, N. W., Baker, D. S., Speer, V. C., and Hays, V. W. 1967. Reproductive performance of sows hand-mated on the first estrus after early weaning. (Abs.) J. Anim. Sci. 26:1467-1468.
- Body, W. G., Kauffman, R. G., and Cassens, R. G. 1967. Histochemical and biochemical observations on muscles from fasted-refed pigs. (Abs.) J. Anim. Sci. 26:1471-1472.
- Morrison, S. R., Bond, T. E., and Heitman, H. Jr. 1967. The effect of humidity on weight gains and feed efficiency of growing-finishing pigs. Sixth Annual Swine Day, U. of Calif. p. 13.
- Morrison, S. R., Hintz, H. F., and Givens, R. L. 1967. Lack of response by growing-finishing pigs to germicidal ultraviolet radiation. J. Agr. Sci. (London) 69(1):131-132.
- Morrison, W. D. 1967. The swine industry in Canada. Proc. Ill. Swine Growers Day, March 21, 1967, Urbana. U. Ill. Anim. Sci. Dept. (Mimeo) AS-641F.
- Moskal, V. 1967. The degree of inbreeding of Prestice black spotted pigs. Eng. Sum. (Cz.) Zivoc. Vyr. 12:197-208. (ABA 35:3845).
- Moskal, V. 1967. The regeneration of Prestice pigs. Eng. Sum. (Cz.) Ved. Prace Vysk. Ust. Chov Prasat Kostelci nad Orlici 2(1966):59-76. (ABA 35:3755).
- Moskov, M., Boev, P., Krastev, H., Bachnev, D., Kowatschev, K., Bonewa, L., and Piperkova, D. 1967. Embryometrics applied to the domestic pig. (Sus scrofa domestica) Eng. Sum. (Ger.) Arch. Tierzucht. 10(6):487-500.
- Mount, L. E. 1967. The heat loss from new-born pigs to the floor. Res. Vet. Sci. 8(2):175-186.
- Mount, L. E., and Holmes, C. W. 1967. The effect of ambient temperature on heat loss from groups of young growing pigs. A.R.C. Inst. of Anim. Physiol, Babraham, Cambridge. PIDA Index of Pig. Res. London, Jan. pp. 4-6.



1967

- Mount, L. E., Holmes, C. W., Start, I. B., and Legge, J. A. 1967. A direct calorimeter for the continuous recording of heat loss from groups of growing pigs over long periods. J. Agr. Sci. 68(1): 47-55.
- Moyer, W. A. 1967. Test swine to really know. Kans. Stkmn. 52(11):50.
- Moyer, W. A. 1967. Steps in gilt selection. Nat'l. Hog Fmr. Sept. pp. 30-31.
- Muggenburg, B. A. 1967. Experimental production of gastric ulcers in swine. Diss. Abs. 28(3):1142B-1143B.
- Muggenburg, B. A., Kowalczyk, T., Hoekstra, W. G., and Grummer, R. H. 1967. Effect of certain management variables on the incidence and severity of gastric lesions in swine. Vet. Med. 62(11):1090-1094.
- Muggenburg, B. A., Reimann, E. M., Kowalczyk, T., and Hoekstra, W. G. 1967. Effect of reserpine and histamine in mineral oil beeswax vehicle on gastric secretion in swine. Amer. J. Vet. Res. 28(126): 1427-1435.
- Munday, L. 1967. Diseases of the central nervous system of pigs in Tasmania. Austral. Vet. J. 43(9):374-378.
- Murphree, R. L. 1967. Somatic changes in the fetus. (swine). Semiannu Prog. Rpt. (Agr. Res.) July 1-Dec. 31, 1966. Agr. Res. Lab., A.E.C. U. Tenn. Oak Ridge, U.S.A.E.C. Div. Tech. Inform ORO-657. pp. 3-5.
- Murphree, R. L. 1967. Somatic changes in the fetus. (swine). Semiannu Prog. Rpt. (Agr. Res.) Jan. 1 - June 30, 1966. Agr. Res. Lab., A.E.C. U. Tenn. Oakridge, U.S.A.E.C. Div. Tech. Inform. ORO 653. pp. 5-8.
- Nachtwey, D. S., Ainsworth, E. J., and Leong, G. F. 1967. Recovery from radiation injury in swine as evaluated by the split-dose technique. Radiat. Res. 31(3):353-367.
- Nafstad, I. 1967. Gastric ulcers in swine. I. Effect of dietary protein, dietary fat and vitamin E on ulcer development. Path. Vet. 4(1):1-14.
- Nafstad, I., and Tollersrud, S. 1967. Gastric ulcers in swine. 2. Effects of high fat diets and vitamin E on ulcer development. Path. Vet. 4(1):15-22.
- Nafstad, I., Tollersrud, S., and Bavstad, B. 1967. Gastric ulcers in swine. 3. Effects of different proteins and fats on their development. Path. Vet. 4(1):23-30.



1967

- bandov, A. V., Cook, B., Kaltenbach, C. C., and Keyes, P. L. 1967. Comparative studies on progesterone synthesis in vitro-thoughts on corpus luteum formation. (sheep, cattle, pigs). Reproduction in the Female Mammal. Butterworth. pp. 338-345.
- sen, P., and Nielsen, K. 1967. Studies on chronic enterocolities in pigs. Metabolism of I-labelled IgG immunoglobulin. Nord. Vet. Med. 19(11):524-530.
- son, L. W., Todd, G. C., and Migaki, G. 1967. Ovarian neoplasma in swine. J. Amer. Vet. Med. Assoc. 151(10):1331-1333.
- ovski, P., and Ilkovski, R. 1967. Some correlations between characters of ham morphology and the amount of meat in the pig. Eng. Sum. (Ser.) Veterinaria (Sarajevo) 16(4):453-642. (ABA 36:1674).
- man, C. W., Thrasher, D. M., Hansard, S. L., Mullins, A. M., and Boulware, R. F. 1967. Effects of tallow in swine rations on utilization of calcium and phosphorus. J. Anim. Sci. 26:479-484.
- nton, T. A., and Nielsen, P. B. 1967. The D blood group system of the pig. Immunogenet. Let. 5:79-80.
- nton, T. A., and Nielsen, P. B. 1967. The D blood type system in pigs. Eng. Sum. (Dan.) Aarsberet. Inst. Sterilitetsforsk. K. Vet.-og. Landbohojshk (Copenhagen) 1967:103-108. (ABA 36:1709).
- chelmann, M. 1967. Temperature selection capacity of newborn piglets. Eng. Sum. (Ger.) Mon.H. Vet.Med. 22(18):739-743.
- elsen, A. J. 1967. Planning of respiration experiments with growing bacon pigs, statistical analysis of the results and control investigations derived therefrom. Acta Agr. Scand. 17(4):247-256.
- kolic, P. 1967. The incidence of sterility in the sow with reference to the bacterial flora of the genitalia. Eng. Sum. (Ser.) Veterinaria (Sarajevo) 16:235-248. (ABA 36:607).
- kolic, D., Milojic, M., and Lazarevic, L. 1967. The reproductive performance of Dutch Landrace pigs in Yugoslavia. Eng. Sum. (Ser.) Arh. Poljopr. Nauke 20(69):97-112. (ABA 36:1645).
- kolic, P. 1967. Study of the distribution of sterility of sows with regard to microorganisms of sex organs. Eng. Sum. (Ser.) Veterinaria 16(2):235-248.



1967

- Nikolov, V. 1967. On some methods and means in examination of pig carcasses by conveyor-system. Vet. Sbirka (Sofiya) (2), 24.
- Niswender, Gordon Dean. 1967. Direct effects of embryos and the uterus on the function of the corpora lutea in sheep and swine. Ph.D. Thesis, U. Ill. Libr., Urbana.
- Nitzsche, G., and Englisch, H. G. 1967. Investigation of the occurrence of genotype-environmental interaction in the fattening performance and carcass characters of pigs. Eng. Sum. (Ger.) Arch. Tierzucht. 10(3):227-243. (ABA 36:552).
- Norby, J. G., Schonheyder, F., Madsen, A., Clausen, H., and Lorentzen, K. A. 1967. The effect of lard and butter on plasma lipids and aorta of boars, male rabbits, and male rats and on the growth, feed consumption and carcass quality of boars. Eng. Sum. (Dan.) Arb. Landokon. Forsogslab. (Copenhagen).
- Norrish, J. G., and Denniss, R. H. 1967. For greater profits weigh and backfat probe. Hog Prod. 3(5):5-7.
- Novy, M. J., Hoversland, A. S., Koler, R. D., and Metcalfe, J. 1967. Comparison of oxygen affinity and hemoglobin type in the adult and fetal miniature pig. (Abs.) Fed. Proc. 26:485. Mar-April.
- Nozdryn-Plotnicki, J. 1967. Studies on biological and economic bases for determining the time at which piglings should be weaned. Eng. Sum. (Pol.) Ann. U. M. Curie-Sklodowska Sect. E. 20(1965): 283-318. (ABA 36:1675).
- Obertas, E. I. 1967. Fetal development of the Landrace swine breed in connection with age and position in the horns of the uterus. Eng. Sum. (Rus.) Moskov. Obshch. Ispytatelei Prirody. Trudy Otd. Biol. 26:129-136.
- O'Bryant, J. B. 1967. Merchandizing of high quality pork. Mktg. Wksp. #10. Proc. 10th Natl. Pork Indus. Conf. Nov. 9-10. Lincoln.
- O'Grady, J. F. 1967. Carcase quality in pigs. Farm Res. News 8(2): 36-39.
- O'Grady, J. F. 1967. Effect of level and pattern of feeding during pregnancy on weight change and reproductive performance of sows. Irish. J. Agr. Res. 6(1):57-71. (ABA 35:3868).
- Ohno, H., Suzuki, K., and Kimura, T. A. 1967. A non-heme iron protein from pig testis and its substitution for adrenal non-heme protein (adrenodoxin) in steroid 11 beta-hydroxylation. Biochem. Biophys. Res. Commun. 26(6):651-655.



1967

- winski, S., Kosiba, E., Kowalewski, W., and Miller, H. 1967. Establishing of optimal conditions for counterpressure pasteurization of hams and shoulders. Eng. Sum. (Pol.) Inst. Przemysl Miesnego Rocz. 4:139-156.
- ivier, L., and Lauvergne, J. J. 1967. A study of the inheritance of the muscular hypertrophy of the Pietrain pig; preliminary results. Eng. Sum. (Fr.) Ann. Med. Vet. 111:104-109. (ABA 35:3846).
- ivier, L., and Legault, C. 1967. The direct influence of the boar on the size and weight of litters obtained by artificial insemination. Eng. Sum. (Fr.) Ann. Zootech. 16(3):247-254.
- ivier, L., and Vanderhaegen, J. 1967. A note on the comparative value of 4 methods for estimating fat percentage in pig carcasses. Eng. Sum. (Fr.) Annls. Zootech. 16(3):255-262. (ABA 36:2794).
- vedt, I. T. 1967. Breeding programs for commercial swine producers. Proc. Southwest Pork Symp. West Texas State U., Canyon, Texas, December 4, 1967.
- vedt, I. T. 1967. Highlights of recent swine breeding studies at Oklahoma State University. Proc. Swine Short Course, Oklahoma City, Dec. 1, 1967.
- vedt, I. T., Stephens, D. F., Rule, D. R., and Sharp, W. E. 1967. Relationships between growth rate, probe backfat thickness and carcass traits in swine. Okla. Agr. Expt. Sta. MP 79:26.
- an, R. 1967. Breeding methods in large-scale swine husbandry. Hu. Magyar Mezogazdasag 22(17):18-19.
- eilly, P. J. 1967. Studies on the vaginal epithelium of the sow and its application to pregnancy diagnosis. Irish Vet. J. 21:234-238. (ABA 37:1705).
- eilly, P. J. 1967. Review of pregnancy diagnosis in the sow; an investigation into the biopsy technique. M.V.M. Thesis, Ireland, Natl. U., UK.
- ie, L. E., Christian, R. E., and Everson, D. O. 1967. A comparison of loin-eye areas taken at five locations. (Abs.) J. Anim. Sci. 26:899.
- inska, Z. 1967. Study on the development and classification of pig breeds in Europe. World Rev. Anim. Prod. 3(15):72-77. (ABA 37:2684).



1967

- Osinska, Z. 1967. Suitability of the dot count for measuring areas of cross-sections of porcine longissimus dorsi muscle. *Rocz. Nauk. Roln. Ser. B.* 89:615-621. (ABA 36:1676).
- Owen, J. B., and Ridgman, W. J. 1967. Further studies of the effect of dietary energy content on the voluntary intake of pigs. *Anim. Prod.* 10:85-91.
- Owen, J. B., and Ridgman, W. J. 1967. The effect of dietary energy content on the voluntary intake of pigs. *Anim. Prod.* 9:107-113.
- Owen, J. B., and Ridgman, W. J. 1967. The effect of stage of growth and dietary bulk and the voluntary intake and efficiency of food conversion in pigs. *PIDA Index of Pig Res.*, Jan. pp. 51.
- Palludan, B. 1967. A-avitaminosis in swine. A study on the importance of vitamin A for reproduction. *Nord. Vet. Med.* 19:131-133. (ABA 36:608).
- Palmer, A. Z., Carpenter, J. W., and Combs, G. E. 1967. Influence of protein level and hormone on pigs. (Abs.) *J. Anim. Sci.* 26:216.
- Parker, J. W., and Clawson, A. J. 1967. Influence of level of total feed intake on digestibility, rate of passage and energetic efficiency of reproduction in swine. *J. Anim. Sci.* 26:485-489.
- Parrish, F. C. Jr. 1967. Biochemistry and physiology of striated muscle. Panel discussion at Meat Industry Res. Conf., Chicago, Ill. March 23, 1967. AMIFC.
- Parrish, F. C. Jr. 1967. Hydrolytic enzymes of porcine muscle. (Abs.) *J. Anim. Sci.* 26:899.
- Paska, I. 1967. A comparison of productivity of crossbreds with various percentages of Landrace blood. *Eng. Sum. (Cz.) Pol'nohospodarstvo* 13(2):122-127. (ABA 35:3793)
- Patterson, R. L. S. 1967. A possible contribution of phenolic components to boar odour. *J. Sci. Food & Agr.* 18(1):8-10.
- Paufler, S. 1967. Disturbance of spermatogenesis in domestic animals. *Deut. Tierarztl. Wchn. Schr.* 74(17):442-446.
- Paulick, Ch., Neurand, K., and Wilkens, H. 1967. Topographical anatomy of injection sites in pigs. *Deut. Tierarzt. Wchn. Schr.* 74(20):519-524. *Eng. Sum. (Ger.).*



1967

- el, O., Kalousova, V., and Vranovska, J. 1967. Results of microbiological analysis of meat of fattened swine slaughtered because of radiation injuries. Eng. Sum. (Cz.) Vet. Med. (Praha) 40(7): 361-366.
- erson, A. M. 1967. Biochemical composition of the body. In 'Studies on Nutrition problems', edited by Turchetto, E. Bologna, Italy: Arti Grafiche Emiliane. p. 128.
- erson, A. M. 1967. Role of scientific know-how in future for pork. Natl. Provis 157(25):22-25.
- se, A. H. R. 1967. The Pig Industry Development Authority's selection index. (Abs.) Anim. Prod. 9:279-280. (ABA 35:2119).
- eyra, R. 1967. Disease problems of the pregnant sow. (abortion, dystocia and stillbirth). Phil. Farms and Gardens 4(5):14-15.
- ny, R. H. C. 1967. Clinical haematology. II. The blood picture as an aid to diagnosis. Vet. Rec. Aug. pp. 181-190.
- ny, R. H. C., and Randall, G. C. 1967. An investigation into the cause of losses of pigs during the pre-weaning period. PIDA Index of Pig Res. pp. 49.
- cy, D. H., and Hulland, T. J. 1967. Dermatositis vegetans (vegetative dermatosis) in Canadian swine. Canad. Vet. J. 8(1):3-9.
- cjes, I. 1967. The oestrous cycle and characteristics of oestrus in the same sows during the year. Eng. Sum. (Hung.) Magyar. Allat. Lapja (Budapest) 22(11):513-515. (ABA 36:1729).
- rkinson, R. E. 1967. Important problems and decision for producers on reproduction. Repr. Wkshp. #9. Proc. 10th Natl. Pork Indus. Conf. Nov. 9-10. Lincoln.
- rry, G. C., and Watson, J. H. 1967. Sources of variation in the uptake of a marker antibody by piglets. Anim. Prod. 9(3):377-384.
- rry, G. C., and Watson, J. H. 1967. Variation in the absorption of a colostrally secreted marker antibody in piglets. Anim. Prod. 9(3):385-391.
- rry, G. C., and Watson, J. H. 1967. A note on the selective uptake of serum proteins in piglets following dosage with porcine serum. Anim. Prod. 9(4):557-559.



1967

- Perry, T. W. 1967. Factors influencing esophagogastric ulcers in swine. Ulcers in Swine: Their Cause and Prevention. Feeds and Feeding Wkshp. #8. Proc. 10th Natl. Pork Indus. Conf. No. 9-10, Lincoln.
- Perry, T. W., and Pickett, R. A. 1967. Nutritional factors affecting esophagogastric ulcers in swine. Proc. 7th Internatl. Cong. Nutr. 7(5):820-822.
- Perry, T. W., and Pickett, R. A. 1967. Stomach ulcers in swine. Proc. Purdue U. Swine Day, Sept. 8, 1967. Lafayette. Purdue U. Anim. Sci. Dept. (Mimeo) AS-368.
- Perry, T. W., and Pickett, R. A. 1967. Ulcers in swine. Hog Prod. 3(11):10-11.
- Pestana, C. 1967. The function of the thymus in pigs. Diss. Abs. 27(12):4541B.
- Peterlk, M., and Waldhausel, W. 1967. Isolation of a non-dialysable active pressor principle from pig serum. Nature 214(5085):279.
- Peters, W. H., Hetzer, H. O., and Richardson, G. V. 1967. Effect of early weaning on growth and fatness in swine. (Abs.) J. Anim. Sci. 26:1464.
- Pfau, A. 1967. Color changes in the M. long dorsi of the pig during rigor mortis. Eng. Sum. (Ger.) Fleischwirtschaft 47(1):49-52.
- Pfeiffer, H. 1967. Influence of ambient temperature and humidity on the performance of fattening pigs. Eng. Sum. (Ger.) Mon.H. Vet.Med. 22(24):980-985.
- Phelps, A. 1967. Positively pregnant. Pig Fmg. 15(8):22-23.
- Philippo, M. 1967. Early embryonic mortality in gilts. PIDA Proc. Symp. on 'The nutrition of sows', Nottingham, p. 6.
- Philippo, M., and Cox, J. E. 1967. Ovarian progesterone and embryonic survival in the pig. J. Reprod. & Fertil. 14:351. (ABA 36:1010).
- Piatkowski, B., and Jung, H. 1967. The protein content of growing pigs of different sex and type. Part 3. The effect of implanting diethylstilbestrol on the protein content and properties of boar carcasses. Eng. Sum. (Ger.) Arch. Tierzucht. 10(1):61-64. (ABA 35:3795)
- Pickett, B. W., and Komarek, R. J. 1967. Effect of cold shock and freezing on loss of lipid from spermatozoa (boars.) J. Dairy Sci. 50:753-757.



1967

- Skett, B. W., Komarek, R. J., Gebauer, M. R., Benson, R. W., and Gibson, E. W. 1967. Lipid and dry weight of ejaculated, epididymal and post-castrate semen from boars. J. Anim. Sci. 26:792-798. (ABA 36:625)
- Perce, A. E., and Smith, M. W. 1967. The in vitro transfer of bovine immune lactoglobulin across the intestine of new-born pigs. J. Physiol. London 190:19-34.
- Ke, I. H. 1967. The effect of level and source of dietary protein and plane of nutrition on uterine and extra-uterine changes and on reproductive performance of the pregnant sow. Ph.D. Thesis, U. Leeds.
- Ke, I. H., and Boaz, T. G. 1967. The effect of condition at service and plane of nutrition from service on ovulation, early foetal mortality and nitrogen utilisation by the pregnant sow. PIDA Proc. Symp. on 'The nutrition of sows', Nottingham, p. 13.
- Richard, E. I. 1967. Reproductive problems in swine (causing sterility). Norden News 42(2):24-27.
- rtle, E. C. 1967. Chromosomes of the female peccary (*Tayassu tajacu*). Mammalian Chromosome Newsletter, 8 (1), 16.
- ank, S. J. 1967. Mechanisms of experimental immuno-infertility (pig). Proc. 8th Internatl. Conf. of the Internatl Planned Parenthood Fed, 9-15 Apr. 67, Santiago. 403-407.
- att, B. S., and Stewart, R. J. C. 1967. Experimental protein-calorie deficiency; histopathological changes in the endocrine glands of pigs. J. Endocrinol. 38(2):121-143.
- att, C., and Bochno, R. 1967. Counting the tests variety of experiments in zootechnology. Eng. Sum. (Pol.) Olsztyn. Wyzsz. Szkola Roln. Zesz.Nauk. 23(4):875-889.
- att, C. 1967. On the sex sequence in pigs. Eng. Sum. (Pol.) Olsztyn. Wyzsz. Szkola Roln. Zesz. Nauk. 23:891-903. (ABA 37:1706).
- limpton, R. F. (Jr.) Cahill, V. R., Teague, H. S., Grifo, A. P. (Jr.) and Kunkle, L. E. 1967. Periodic measurement of growth and carcass development following diethylstilbestrol implantation of boars. J. Anim. Sci. 26:1319-1324. (ABA 36:1677).
- lisko, N. T. 1967. The preservation of semen and preserving ability of the DNA in spermatozoa (swine). Eng. Sum. (Russ.) Vest. Sel-Khoz. Nauki (Moskow) 12(6):69-75. (ABA 36:626).



1967

- Plocek, F. 1967. The genetic effect of selection for increased fertility in Czechoslovak Improved White pigs. Eng. Sum. (Cz.) Zivoc. Vyr. 40(8):599-606. (ABA 36:1730).
- Plocek, F. 1967. The effect of the age of the sow at first mating on her performance. Eng. Sum. (Cz.) Ved. Prace Vyzk. Ust. Chov. Pís Kostelci Nad Orlicí 2(1966):11-24. (ABA 35:3869).
- Plonka, S. 1967. Ratio of meat surface to fat surface in pig carcass section and photographic standards as evaluation basis of its quality. Eng. Sum. (Pol.) Acta Agr. Silvest. Zootech. (Krakow) 7(1):35-61. (ABA 36:3814).
- Podany, J., and Muzikant, J. 1967. A study of criteria for the basic values of the quality of boar ejaculates. Eng. Sum. (Cz.) Vet. Med. (Praha) 12:417-426. (ABA 36:628).
- Polge, C. 1967. Control of ovulation in pigs. Proc. Roy. Soc. Med. 60:654-655.
- Polge, C., and Day, B. N. 1967. Effect of progesterone on fertility in swine. (Abs.) J. Anim. Sci. 26:1495.
- Polge, C., and Day, B. N. 1967. Induced ovulation in pituitary-suppressed gilts. (Abs.) J. Anim. Sci. 26:1495.
- Polge, C., Moor, R. M., Day, B. N., Booth, W. D., and Rowson, L. E. A. 1967. Embryo numbers and luteal maintenance during early pregnancy in swine. (Abs.) J. Anim. Sci. 26:1499.
- Polge, E. J. C. 1967. A study of the physiology of boar semen with special reference to spermatozoa preservation by deep freezing. Unit of Repr. Physiol. and Biochem. Anim. Res. Sta. Huntingdon, Rd, Cambridge, A.R.C. PIDA Index of Pig Res. London, Jan. pp. 10.
- Polge, E. J. C. / 1967. Control of oestrus and ovulation in swine and factors influencing the survival of embryos during early stages of pregnancy. Unit. of Repr. Physiol. and Biochem. Anim. Res. Sta. Huntingdon, Rd, Cambridge, ARC. PIDA Index. of Pig Res., London. Jan. pp. 11-12.
- Pond, W. G., Babatunde, G. M., Walker, E. F., and Chapman, P. 1967. Fatty acids for young swine: are polyunsaturated acids required. Cornell Nutr. Conf. Feed Manuf. Proc. 1967:67-73.
- Ponka, S. 1967. Ratio of area of meat to area of fat in sections of the pig carcass, and photographic representations as a basis for estimating carcass quality. Eng. Sum. (Pol.) Acta Agr. Silvest. Zootech. (Krakow) 7(1):35-61.



1967

- le, Howard Raymond, Jr. 1967. Effects of buffering capacity on metabolism and storage of boar spermatozoa. M.S. Thesis, Purdue U. Libr., Lafayette.
- ovici, F., Radu, A., and Paraschivescu, G. 1967. The percentages of meat from the various areas of the carcass of pigs of various breeds. Eng. Sum. (Rom.) Lucr. Sti. Inst. Cercet. Zootch. (Bucharest) 25: 545-555. (ABA 36:554).
- ers, M. J. 1967. An economic analysis of the futures market for pork bellies. Diss. Abs. 28(2):348A.
- u, A. 1967. Post mortem colour changes in the M. long dorsi of the pig during rigor mortis. Eng. Sum. (Ger.) Fleischwirtschaft 47 (1):49-52.
- scott, J. H. D., and Lamming, G. E. 1967. The influence of castration on the growth of male pigs in relation to high levels of dietary protein. Anim. Prod. 9:534-545. (ABA 36:555).
- e, M., and Seidel, H. 1967. Changes in the content of Na, K, Ca, Mg., and P in the serum of sows before, during and after farrowing. Relationship of Ca content to the electrical impulses of systole. Eng. Sum. (Ger.) Arch. Expt. Vet. Med. 21:1225- 1234.
- in, D. M. 1967. Effect of vitamin A on reproductive performance of sows. Eng. Sum. (Ser.) Acta Vet. (Belgrade) 17:261-272. (ABA 37: 1707).
- szo, K. 1967. Hydrothermal stability of muscle collagen as influenced by age in pigs. Eng. Sum. (Pol.) Roczn. Nauk. Roln. 90(1):59-66.
- r, A. 1967. Influence of technological processes on the keeping quality of hog lard during long storage in metal cans. Eng. Sum. (Ger.) Verpack.-Rundsch. 18(4), Tech-Wiss. Beil. 25-31. Apr. 1967.
- ten, G. Van. 1967. Tail-biting in pigs. Eng. Sum. (Du.) Tijdschr. Diergeneesk. 92(11):705-712.
- lu, A., and Popovici, F. 1967. The growth rhythm and food conversion of pigs in the various periods of fattening during performance testing. Eng. Sum. (Rom.) Lucr. Sti. Inst. Cercet Zootch. (Bucharest) 25:535-543. (ABA 36:570).
- eburn, J. R., Blair, R., and English, P. R. 1967. A study of factors affecting lean meat development. PIDA Index of Pig Res. pp. 43.



1967

- Raeburn, J. R., and Ward, J. 1967. A review from an economic standpoint of the scientific literature on pig production problems and a compilation of an index of economic data of particular significance to the pig industry of the United Kingdom. PIDA Index of Pig Res. Jan. pp. 44.
- Raicu, E., Georgescu, D., Davidov, M., and Rosca, N. 1967. The influence of norm and ad libitum feeding upon carcass quality in pigs. Eng. Sum. (Rum.) Lucr. Sti. Inst. Cercet. Zooteh. (Bucharest) 25:557-56
- Randall, G. C. B., and Penny, R. H. C. 1967. Stillbirths in pigs: the possible role of anoxia. Vet. Rec. 81(14):359-361.
- Rankovic, P., Anastasijevic, V., and Mrdenovic, P. 1967. The effect of heterosis on the fattening performance of Large White and Dutch Landrace commercial crosses. Eng. Sum. (Ser.) Arh. Poljopr. Nauke (Belgrade) 20(68):127-136. (ABA 36:556).
- Rappen, W. H., Schroder, J., and Cahuc, A. 1967. Gain and food conversion in growing pigs differing in fattening performance and lean and fat production. Eng. Sum. (Ger.) Zucht.K. 39:358-370. (ABA 36 2795).
- Rasbech, N. O. 1967. Gonadotropins and synthetic progesterones in the reproduction of swine. Eng. Sum. (Scand. languages). Proc. 5th Cong. 15-18 Aug 66 of the Scandinavian Vet. Soc. for Sexual Physiol. and Sexual Path. Stockholm. (ABA 37:717).
- Rasmusen, B. A. 1967. Evidence for a new bloodgroup system in pigs. Immunogenet. Let. 5(1):57.
- Ratcliffe, H. L., Luginbuhl, H., and Chacko, S. K. 1967. Social factors and atherosclerosis in swine. Circul. 36, Suppl. II. 33 abs.
- Rathmacher, R. P. 1967. Relationship of blood flow and progestin levels on uterine-ovarian function in pigs and rabbits. Ph.D. Thesis, Iowa State U. Libr., Ames. Also Diss. Abs. 28(5):2114B.
- Rathmacher, R. P., and Anderson, L. L. 1967. Blood flow and progesterone levels in the ovary of cycling and pregnant pigs. (Abs.) J. Anim. Sci. 26:1496-1497.
- Rathmacher, R. P., Anderson, L. L., Henricks, D. M., and Melampy, R. M. 1967. Compensatory ovarian function during pregnancy in the pig. Endocrinol. 81:430-434.
- Rathmacher, R. P., Anderson, L. L., Kawata, K., and Melampy, R. W. 1967. Intra-uterine foreign body and pregnancy in pigs. J. Reprod. Fertil. 13(3):559-561.



1967

- dy, J. C. 1967. Pig raising and pork production programme at the Allahabad Agricultural Institute, Allahabad. Allahabad Fmr. 41(4):233-240. (ABA 36:1679).
- d, H. C. B. 1967. Observations on oestrus, ovulation and fertility in the domestic pigs. Ph.D. Thesis, Royal Vet. Coll., London. U.
- d, R., and Todd, P. M. 1967. An electron microscope study of the distribution of connective tissue fibrils in pig muscle and their relationship to sarcolemm. PIDA Index of Pig Res. pp. 64.
- chert, L. E. Jr. 1967. Purification and properties of pituitary and urinary LH. (human, ovine, bovine, porcine and equine). Reproduction in the Female Mammal. (Proc. of the Easter Sch. 1966, Sch. of Agr., U. of Nottingham), Lamming, G. E., Amoroso, E. C. (Eds.)
- mann, E. M., Maxwell, C. V., Grummer, R. H., Kowalczyk, T., Benevenga, N. J., and Hoekstra, W. G. 1967. Differential effect of dietary particle size on the contents of various regions of the swine stomach. (Abs.) J. Anim. Sci. 26:1498.
- nhard, H. J., and Mickwitz, G. Von. 1967. Experimental investigations in pigs concerning the direction of the electric current through the body in evaluating electric accidents. Eng. Sum. (Ger.) Deut. Tierarztl. Wchn.Schr. 74(16):405-407.
- lsfeld, R. A., Hirsch, P. F., Wasthed, A. B., Voelkel, E. F., and Munson, P. L. 1967. Purification of porcine thyrocalcitonin. Proc. Natl. Acad. Sci. 58(1):328-359.
- adel, Jan. 1967. Studies of blood group and protein variants as a means of revealing similarities and differences between animal populations. Anim. Breed. Abs. 35(3):371-383.
- pciuc, E., and Andronescu, A. 1967. Demonstration of musculo-elastic cushions in the A. testicularis in man, pig, cow, sheep, cat, dog, mouse, rat, guinea pig, rabbit, hen, lizard (*Lacerta viridis*). Eng. Sum. (Ger.) Acta. Anat. 66(1):118-132.
- ce, V. A., Andrews, F. A., Warwick, E. J., and Legates, J. E. 1967. Breeding and Improvement of Farm Animals. 6th edit. McGraw-Hill Book Co., N. Y.
- ch, T. D., Turman, E. J., and Hillier, J. C. 1967. A comparison of the reproductive performance of hand-mated and lot-mated gilts. (Abs.) J. Anim. Sci. 26:1494.



1967

- Rich, Travis Dean. 1967. A comparison of the ovulation rate, and embryo survival of herd-mated and lot-mated gilts. M.S. Thesis, Okla. State U. Libr., Stillwater.
- Rickard, R. C. 1967. An economic survey of the bacon curing industry in Great Britain. Exeter U. Dept. Agr. Econ. Rpt. No. 166 (Newton Abbot).
- Rickard, R. C. 1967. A common market for pigs. An examination of the E.E.C. regulations for pigs and pig meat effective from 1st July, 1967. Report for PIDA, 46 pp.
- Riddell, A. G., Terblanche, J., Peacock, J. H., Tierris, E. J., Bowes, J. and Hunt, A. C. 1967. Experimental liver homotransplantation in pigs. 1st Internatl. Cong. Transpl. Soc., Paris.
- Rigby, J. P. 1967. The distribution of spermatozoa in the reproductive tract of the sow following artificial insemination. Ph.D. Thesis, U. Liverpool.
- Rigby, J. P. 1967. The cervix of the sow during oestrus. Vet. Rec. 80(23):672-675. (ABA 35:3870).
- Rigor, E. M., Fajardo, R. C., and Bonnagon, P. L. 1967. The performance of Large White x Landrace x Philippine pig crosses ( $F_2$ ) and the inter se mated ( $F_3$ ) pigs. Phil. Agr. 51:536-540. (ABA 37:3836).
- Rigor, E. M., Fajardo, R. C., and Supnet, M. G. 1967. Performance of Philippine pig x Landrace and Large White x Landrace x Philippine pig crosses. Phil. Agr. 50:861-865. (ABA 36:3830).
- Riker, J. T. III. 1967. The influence of various grains and temperature regimes on the etiology of esophagogastric ulcers in swine. Diss. Abs. 27B, 2211.
- Riker, J. T. III, Perry, T. W., Pickett, R. A., and Heidenreich, C. J. 1967. Influence of controlled temperatures on growth rate and plasma ascorbic acid values in swine. J. Nutr. 92(1):99-103. (ABA 36:571).
- Riker, J. T., III, Perry, T. W., Pickett, R. A., and Curtin, T. M. 1967. Influence of various grains on the incidence of esophagogastric ulcers in swine. J. Anim. Sci. 26:731-735.
- Riker, J. T. III, Perry, T. W., Pickett, R. A., Heidenreich, C. J., and Curtin, T. M. 1967. Influence of controlled ambient temperatures and diets on the incidence of esophagogastric ulcers in swine. J. Anim. Sci. 26:736-740.



1967

- gmar, J. E., and Ekman, L. 1967. Hematological and chemical determinations on blood from anoestral gilts. Eng. Sum. (Scand. languages) Proc. 5th Cong. 15-18, Aug. 66 of the Scandinavian Vet. Soc. for Sexual Physiol. and Sexual Path. (Stockholm).
- pel, R. H. 1967. Protein and amino acid nutrition of gravid swine. J. Anim. Sci. 26:526-532.
- era, E. M., Forsyth, I. A., and Folley, S. J. 1967. Lactogenic activity of mammalian growth hormones in vitro. Proc. Soc. Expt. Biol. Med. 124, 859.
- , O. 1967. Use of Hrudka method of determination of dehydrogenase for the examination of breeding boar semen. Eng. Sum. (Cz.) Zivoc. Vyr. 40(1):27-34.
- erts, E. D., Ramsey, F. K., Switzer, W. P., and Layton, J. M. 1967. Influence of streptococcus equisimilis on sites of endochondral ossification in swine. Amer. J. Vet. Res. 128(127):1677-1686.
- ertson, A., Imlah, P., and Lang, B. G. 1967. Blood group research unit. Royal (Dick) Sch. of Vet. Studies, U. Edinburgh, Edinburgh, Scotland. PIDA Index of Pig Res. London, Jan. pp. 53.
- ertson, A., and Rowntree, P. G. M. 1967. A comparison of the performance of minimal disease pigs and conventional animals maintained under similar conditions of management. PIDA Index of Pig Res., Jan. pp. 54.
- ison, O. W. 1967. Genetics of carcass quality. N. C. State U. ANS Rpt. 173 AB Ser. 14.
- oyt, J. F. 1967. Multiple attack and polarity of action of porcine pancreatic alpha-amylase. Proc. Starch Round Table, Lake of the Ozarks, Mo. Sept. 6, 1967.
- oyt, J. F., and French, D. 1967. Multiple attack hypothesis of alpha-amylase action: Action of porcine pancreatic, human salivary and aspergillus oryzae alpha-amylases. Arch. Biochem. and Biophys. 122:8-16.
- esel, O. F., and Neher, G. M. 1967. Experimental hypopituitarism in swine; a sterotoxic method of inducing the condition with beta irradiation. Amer. J. Vet. Res. 28(125):1181-1190.
- loff, D. 1967. Deep-freezing of boar semen in pellet form at -196° C. Eng. Sum. (Ger.) ZuchHyg. Fort.Pfl. Stor. Besam. Haust. 2:75-77. (ABA 35:3890).



1967

- Rohloff, D. 1967. Investigations on preservation of boar semen with dimethylsulphoxide (DMSO). Eng. Sum. (Ger.) Zuchthyg. Fort. Pfl. Stor. Besam. Haust. 2:112-117. (ABA 36:1745).
- Rohloff, D., and Kirschfeld, H. 1967. Research into the suitability of different diluents for conserving boar semen at a refrigerator temperature of 0°C with special attention to the speed of cooling. Eng. Sum. (Ger.) Berlin Munch. Tierarztl. Wchn.Schr. 80(15):289-291.
- Roller, W. L., Teague, H. S., and Grifo, A. P. 1967. High temperatures affect swine reproduction. Ohio Rep. Res. Develop. Biol. Agr. Home Econ. 52(6):83-84.
- Roller, W. L., Teague, H. S., and Grifo, A. P. Jr. 1967. Reproductive performance of swine in controlled warm environments. Trans. Amer. Soc. Agr. Engrs. Gen. Ed. 10:517-518, 522. (ABA 37:720).
- Roller, W. L., Stewart, R. E., and Teague, H. S. 1967. Swine housing environment. Effect of controlled thermal environment upon reproductive performance of swine. Ohio Agr. Res. & Dev. Cntr. Wooster, Anim. Sci. Res. Rpt. May. pp. 33-34.
- Roller, W. L., and Teague, H. S. 1967. Developing a paste feeding system for swine. Agr. Eng. Feb. pp. 82-83.
- Roller, W. L., Teague, H. S., and Grifo, A. P. Jr. 1967. Reproductive performance of swine in controlled warm environments. Trans. Amer. Soc. Agr. Engrs. Gen. Ed. aba 10:517-518, 522.
- Roller, W. L., Teague, H. S., Grifo, A. P. Jr., Cahill, V. R. 1967. Paste feed for growing-finishing pigs. Ohio Agr. Res. Div. Center Res. Sum. 13, pp. 13-18.
- Rook, J. A. F., and Spincer, J. 1967. Precursors of milk constituents in the lactating sow. Dept. Agr. U. of Leeds, Leeds, England. PIDA Index of Pig Res. London, pp. 62.
- Rook, J. A. F., and Witter, R. C. 1967. The relationship between dietary fat and milk secretion of the sow. PIDA Index of Pig Res. pp. 61.
- Roosve, H. 1967. The daily frequency of sucklings of piglings and the suckling process. Eng. Sum. (Est.) Tead. Toode Kog. Eesti Loomak. Vet. Tead. Uurim. Inst. (Tartu) No. 11:170-174. (ABA 36:2796).
- Roosve, H. 1967. The lactation curve of Estonian Large White pigs. Eng. Sum. (Est.) Tead. Toode Kog. Eesti Loomak. Vet. Tead. Uurim. Inst. (Tartu) 11:175-178. (ABA 36:2797).



1967

- as, H., and Bell, M. C. 1967. Dietary CA and ZN effects in irradiated swine. (Abs.) J. Anim. Sci. 26:215-216.
- e, A. 1967. Problems of selling high quality hogs under present incentive marketing systems. Mktg. Wkshp. #10. Proc. 10th Natl. Pork Indust. Conf. Nov. 9-10. Lincoln.
- cker, C., Lindberg, P., and Lannek, N. 1967. Influence of physical training and pre-slaughter exercise on fluid retention, colour and adenosine triphosphate of pork muscle. Acta Vet. Scand. 8:189-192. (ABA 36:557).
- so, V., and Catalano, A. 1967. A study of correlations among some linear and weight measurements of pig carcasses in relation to commercial grading. Eng. Sum. (Ital.) Prod. Anim. 6:191-200. (ABA 37:635).
- gers, A. 1967. A.I. in Holland. Pig Fmg. 15(12):30.
- ymushkin, G. P. 1967. The change of the level and proportions of free amino acids in baby pig's blood before and after feeding with sow's milk. Eng. Sum. (Russ.) Sel'skokhoz. Biol. 2(3):447-450.
- er, R. A., Lister, D., Hoekstra, W. G., and Briskey, E. J. 1967. Physiology of the pig in relation to the development of pale, soft, exudative (PSE) muscle post-mortem. III. The effect of vaso-active agents. (Abs.) J. Anim. Sci. 26:901.
- er, R. A., Lister, D., Hoekstra, W. G., and Briskey, E. J. 1967. Studies on the physiology of the pig in relation to the development of pale, soft, exudative (PSE) muscle post-mortem. IV. The effect of intravenous injection of magnesium sulfate before death. (Abs.) J. Anim. Sci. 26:1470-1471.
- lson, R. 1967. A new reagent, Anti-Ke, in the K blood group system of pigs. Vox. Sang. 12:286-292. (ABA 35:2754).
- lson, R., and Moxley, J. E. 1967. The use of blood groups as markers in a double mating program in swine and evidence for preferential fertilization. Proc. 10th Europ. Conf. Anim. Blood Groups Biochem. Polymorph. Paris, 1966:171-174. (ABA 36:588).
- lson, R., Rasmusen, B. A., and Hradecky, J. 1967. Da, a factor in a new blood group systems in pigs. Canad. J. Genet. & Cytol. 9:794-798. (ABA 36:2832).
- jonski, H., and Smollich, A. 1967. Morphological changes with age of the endocrine system and gonads in the wild pig. Eng. Sum. (Ger.) Zent.Bl. Vet.Med. Reihe A. 14:497-509. (ABA 37:721).



1967

- Salmon-Legagneur, E. 1967. Nutrition of the lactating sow. PIDA Proc. Symp. on 'The nutrition of sows', Nottingham, p. 43.
- Salmon-Legagneur, E. 1967. Prenatal development in the pig and some other multiparous animals. Proc. 14th Easter Sch., U. Nottingham on 'Growth and development of mammals'.
- Saunders, C. N. 1967. Abortions, stillbirths and congenital abnormalities. Vet. Rec. 80(25 clin. sup. 9):XV-XVI.
- Schaaf, A., and Herrendorfer, G. 1967. The expected genetic progress in the progeny testing of pigs in groups of different size. Eng. Sum. (Ger.) Arch. Tierzucht. 10:263-278. (ABA 36:1711).
- Schain, R. J., Carver, M. J., Copenhaver, J. H., and Underdahl, N. R. 1967. Protein metabolism in the developing brain: influence of birth and gestational age (pigs). Sci. 156:984-985.
- Schally, A. V., Bowers, C. Y., White, W. F., and Cohen, A. I. 1967. Purification and in vivo and in vitro studies with porcine luteinizing hormone-releasing factor (LRF). Endocrinol. 81(1):77-87.
- Schally, A. V., Saito, T., Arimura, A., Sawano, S., Bowers, C. Y., White, W. F., and Cohen, A. I. 1967. Purification and in vitro and in vivo studies with porcine hypothalamic FSH-releasing factor. Endocrinol. 81:882-892.
- Scharner, E. 1967. Yellowish coloration of fat in porkers. Eng. Sum. (Ger.) Mon.H. Vet.Med. 22(10):418-421.
- Schenk, P. M. 1967. An investigation into the oestrus symptoms and behaviour of sows. Z. Tierzucht. ZuchtBiol. 83(2):87-110. (ABA 35:2770).
- Schicketanz, W., and Richter, H. 1967. Outline studies on the behaviour of the hydrogen-ion concentration in the stomach of suckling piglets between five weeks of age and weaning. Eng. Sum. (Ger.) Mon.H. Vet.Med. 22(12):508-512.
- Schilling, E. 1967. The use of gestagenes with young domestic animals. Eng. Sum. (Ger.) FortPfl. Besam. Aufzucht Haust. 3(3/4):202-221.
- Schilling, E. 1967. Effects of progestagen-treatment on the prepubertal ovary of the pig. Reproduction in the Female Mammal. Butterworth, London. (ABA 36:4200).
- Schmid, D. O., and Buschmann, H. 1967. A new blood group antigen in pigs. Proc. 10th Europ. Conf. Anim. Blood Groups Biochem. Polymorph Paris, 1966:165. (ABA 36:589).



1967

- midt, G. R., Cassens, R. G., and Briskey, E. J. 1967. Development of an isotonic-isometric rigorometer. (Abs.) J. Anim. Sci. 26:1471.
- omberg, D. W. 1967. Demonstration in vitro of luteolytic activity in pig uterine flushings. J. Endocrinol. 38:359-360.
- on, L., and Scheper, J. 1967. Investigations into pig breeding in the German Federal Republic. I. Fattening performance, weight and dimensions of the sides. Eng. Sum. (Ger.) Fleischwirtschaft 47(8):853-858.
- on, L., and Scheper, J. 1967. Investigations into pig breeding in the German Federal Republic. II. Rough tissue composition of the carcass. Eng. Sum. (Ger.) Fleischwirtschaft 47(10):1130-1136.
- hremmer, H., and Deckert, R. 1967. Investigations of the behaviour and performance of tethered nursing sows. Eng. Sum. (Ger.) Arch. Tierzucht. 10(5):399-409. (ABA 36:1697).
- hulke, B., and Ritsch, E. 1967. Comments on the content of eosinophil granulocytes in the blood of piglets of different age. Eng. Sum. (Ger.) Mon.H. Vet.Med. 22(22):898-900.
- hulke, B., and Tegeler, G. 1967. On the elimination of free (nonconjugate) corticosteroids in the urine of pigs. Eng. Sum. (Ger.) Arch. Expt. Vet.Med. 21(5):1253-1256.
- hulze, P. 1967. Electron-microscopical examinations of eosinophil and neutrophil leucocytes in the lymph nodes of pigs. Eng. Sum. (Ger.) Arch. Expt. Vet. Med. 21(5):1305-1317.
- eriba, P. C., and Fries, M. 1967. Aminoacyltransferase stimulation of protein synthesis of pig adrenal polysomes. Nature 214(5083):91-92. April.
- effner, W., Wittig, W., and Rittenbach, P. 1967. Investigations on mulberry heart disease (microangiopathy) of pigs. Eng. Sum. (Ger.) Deut. Tierarztl. Wchn.Schr. 74(9):213-220.
- eibold, H. R., and Davis, C. L. 1967. Generalized myositis ossificans (familial) in pigs. Path. Vet. 4:79-88. (ABA 35:3849).
- elf, H. L. 1967. How excess fat, not muscles, can hamper pig's birth. Natl. Hog Fmr. 12(3):30-32. March.
- elvarajah, T. 1967. Some genetic studies on the litter size of crossbred pigs. Kajian Vet. 1:66-72. (ABA 36:3855).



1967

- Senegacnik, J. 1967. Dilution and storage of boar semen in media with and without egg yolk. Eng. Sum. (Sl.) Zborn. Bioteh. Fak. U. Ljubljana 4:27-36.
- Senft, B., Lecce, J. G., and Berek, G. 1967. Rearing piglets with an automatic feeder (Artificial sow). Eng. Sum. (Ger.) Zucht.K. 39:210-217.
- Senk, L., and Bohm, O. 1967. Dietetic microangiopathy or mulberry heart disease in the Landrace swine breed in Slovenia. Eng. Sum. (Ser.) Vet. Glasn. 21(7):573-581.
- Sharma, Vasu Dev. 1967. Studies concerning the effect of feeding mold corn to swine, with emphasis on female reproduction. M.S. Thesis, Ohio State U. Libr., Columbus.
- Sharpe, H. B. A. 1967. Intranuclear inclusion bodies in the intestinal epithelium of pig fetuses experimentally infected with porcine adenovirus. J. Path. Bact. 93(1):353-355.
- Sharpe, H. B. A. 1967. The influence of weaning at two weeks of age on the body and organ weights of pigs. Brit. Vet. J. 123(3):104-110.
- Shelby, C. E. 1967. Most important problems in swine breeding research. A survey. 30th Annu. Rpt. and Rec. Proc. Conf. Collab. Reg. Swine Breed. Lab. Stillwater, Okla. p. 113.
- Shelby, C. E. 1967. Current swine breeding projects and facilities in the laboratory. 30th Annu. Rpt. and Rec. Proc. Conf. Collab., Reg. Swine Breed. Lab., Stillwater, Okla, p. 151.
- Shelby, C. E. 1967. Bibliography on swine improvement. VI. During the period, 1966. USDA, ARS, AHRD. Reg. Swine Breed. Lab. Ames, Iowa; 76 pp.
- Shelby, C. E. 1967. Genetic aspects of the Production Registry Program. J. Anim. Sci. 26:5-9. (ABA 35:2755).
- Sherritt, G. W., Ziegler, J. H., and Younkin, D. E. 1967. Live hog evaluation by swine producers. (Abs.) J. Anim. Sci. 26:880.
- Shikhov, I. Ya. 1967. Development of hair follicles in the Landrace swine breed. Eng. Sum. (Rus.) Moskov. Obshch. Ispytatelei Priorody Tr. Otd. Biol. 26:137-143.
- Short, Robert E. 1967. Mechanisms controlling ovarian activity. Ph.D. Thesis, U. Wis. Libr., Madison.



1967

- son, R., Rasmusen, B. A., and Hradecky, J. 1967. Da, a factor in a new blood group system in pigs. *Canad. J. Genet. Cytol.* 9, 794.
- or, V. 1967. Differentiation of production type of swine based on the activity of thyroid gland. *Eng. Sum. (Cz.) Acta Zootech. Nitra* 16:37-44.
- or, V. 1967. Qualitative indices of fat for pigs of various breeds. *Eng. Sum. (Cz.) Acta Zootech. Nitra* 16:29-36. (ABA 36:2801).
- or, V. 1967. Physico-chemical properties of pig meat as a basis for an objective method of selection. *Eng. Sum. (Russ.) Acta Zootech. Nitra* 16:5-28. (ABA 36:2800).
- or, V. 1967. Evaluation of the meat production of pigs on the specific gravity of the carcass halves and of the ham. *Eng. Sum. (Cz.) Zivoc. Vyr.* 12:533-540. (ABA 36:1681).
- or, V. 1967. Differentiation of the productive type of breeds of pig in Czechoslovakia on the basis of thyroid activity. *Eng. Sum. (Cz.) Zivoc. Vyr.* 12:187-196. (ABA 35:3756).
- or, V. 1967. The use of a photometric method for determining the colour of pig meat. *Eng. Sum. (Cz.) Pol'nohospodarstvo* 13:205-212. (ABA 35:3798).
- or, V. 1967. Types of Czechoslovakian swine breeds. I. *Eng. Sum. (Cz.) Pol'nohospodarstvo* 13(12):903-912.
- or, V., and Hladky, V. 1967. The use of inbreeding in linebreeding with pigs. *Eng. Sum. (Cz.) Acta Zootech. Nitra* 15:43-53. (ABA 36:2833).
- or, V., and Hladky, V. 1967. Improving Slovakian Black spotted pigs by crossing with Pietrains. I. *Eng. Sum. (Cz.) Pol'nohospodarstvo* 13(6):436-445. (ABA 35:3799).
- gnoret, J. P. 1967. Duration of the estrus cycle and estrus in the gilt, the effect of estradiol benzoate in the ovariectomized female. *Eng. Sum. (Fr.) Ann. Biol. Anim. Biochim. Biophys.* 7(4): 407-421. (ABA 36:3888).
- gnoret, J. P., Gautier, J., and Lavenet, C. 1967. Duration of oestrous cycle and oestrus under natural conditions and after oestrogen treatment of the ovariectomized gilt. *Eng. Sum. (Fr.) Lab. de Physiol de la Reprod., Ctr. de Recherches vet. et. Zootechniques,* 37 Nouzilly, France.



1967

- Sikes, D., Fletcher, O., and Papp, E. 1967. Further studies on the pathologic alterations of tissues of swine given repeated whole blood transfusions from swine and rheumatoid-like arthritis. Amer. J. Vet. Res. 28(126):1413-1425.
- Simmons, C. W. R. 1967. Meat quality. Pt. 3. Meat. Ind., Nov. pp. 55-
- Singleton, W. L., and Shelby, D. R. 1967. A variation between boars in semen characteristics and fertility. (Abs.) J. Anim. Sci. 26:1499-1500.
- Sink, J. D. 1967. Age and genetic effects on pH changes in adipose tissue. J. Agr. & Food Chem. 15(5):778-780.
- Sink, J. D. 1967. Theoretical aspects of sex odor in swine. J. Theoritol. Biol. 17(1):174-180. (ABA 36:2846).
- Sink, J. D. 1967. Depositing of fat by swine determined in experiments. Sci. Fmr. (Pa) 14(2):5.
- Sink, J. D., Bray, R. W., Hoekstra, W. G., and Briskey, E. J. 1967. Lipid composition of normal and pale, soft, exudative porcine muscle. J. Food Sci. 32:258.
- Skelley, G. C. Jr., and Handlin, D. L. 1967. Pork carcass certification helps to insure meatiness. Clemson U. Agr. Res. 13, (1/2)6.
- Skelley, G. C., and Handlin, D. L. 1967. Evaluating pork carcasses. S. C. Agr. Expt. Sta. B. 535. 15 p.
- Smidt, D. 1967. Sterility problem in modern swine rearing. Eng. Sum. (Ger.) Schweiz. Arh. Tierheilk. 109(11):625-635.
- Smisek, V., Venzarova, L., and Buchta, S. 1967. The possibility of improvement by crossing Czechoslovak Improved White pigs with Landraces for the development of lines. Acta. U. Agr. Fac. Agron. Brno. 15:707-711. (ABA 36:3819).
- Smith, C. 1967. Pig breeding research and applied programs in Europe and Britain. 30th Annu. Rpt. & Rec. Proc. Conf. Collab. Reg. Swine Br. Lab., Stillwater, Okla. p. 139.
- Smith, C. 1967. Animal breeding research in Britain. 19th Annu. Rpt. NC-1 and Proc. Annu. Meet. Tech. Comm. Aug. 21-23, 1967. Wooster. pp. 23-33.
- Smith, C. 1967. A note on the improvement of a trait by selecting on its components. Anim. Prod. 9(1):127-130.



1967

- th, C. 1967. Improvement of metric traits through specific genetic loci. Anim. Prod. 9:349-358.
- th, C., and Jensen, E. L., Baker, L. N., and Cox, D. F. 1967. Gene frequencies and segregation ratios at 17 loci in pigs. (Abs.) J. Anim. Sci. 26:890.
- th, D. H. 1967. Current developments in A.I. for pigs. Vet. Rec. 81:125.
- th, D. H. 1967. Standards of sow performance in British herds. PIDA Proc. Symp. on "The nutrition of sows", Nottingham. p. 64.
- th, H. J., and McLaren, J. B. 1967. Performance of breeds and breed crosses of swine. Tenn. Agr. Expt. Sta. B. 434, 27 pp.
- th, M. W., and Pierce, A. E. 1967. Effect of amino acids on the transport of bovine immune lactoglobulin across newborn pig intestine. Nature 213(5081):1150-1151.
- th, W. C., and Barkes, J. N. 1967. The influence of breed and sex on relationships between specific gravity and carcass composition of pigs of bacon weight. PIDA Index of Pig Res. pp. 83-84.
- th, W. C., Tonks, H. M., and Lawrence, N. 1967. A note on the use of back rasher ratios as predictors of lean percentage in pigs of bacon weight. Anim. Prod. 9(2):255-258. (ABA 35:2729).
- th, W. C., and Tonks, H. M. 1967. Crossbreeding experiments with Hampshire boars. Dept. of Agr. and Rural Econ. U. Newcastle Upon Tyne. Newcastle upon Tyne, Eng. PIDA Index of Pig Res. London. Jan. pp. 84-85.
- er, V. C. 1967. Nutritional research on swine reproduction. South-west Pork Symp., West Texas State U., Canyon.
- ers, A., Rodrigues, A. J., Gorni, M., and Yamamoto, M. 1967. The effect of haemoglobin level on live weight gains in piglets. Eng. Sum. (Port) Bol. Indus. Anim. N.S. 24:41-51. (ABA 37:1691).
- ies, H. G., Slyter, A. L., and Quadri, S. K. 1967. Regression of corpora lutea in pregnant gilts administered antiovine LH rabbit serum. J. Anim. Sci. 26:768-771.
- ackovic, A., Gajic, Z., and Bokorov, T. 1967. The effect of the level of feeding during the lactation on the weight and reproductive capability of sows. Eng. Sum. (Ser.) Arh. Poljopr. Nauke (Belgrade) 20(68):115-126.



1967

- Standish, J. F., and Bowland, J. P. 1967. Effects of varying dietary energy, protein and amino acid levels on growth, nutrient digestibility, and serum protein levels of early weaned pigs. *Canad. J. Anim. Sci.* 47:77-83.
- Stanislaw, C. M., Omtvedt, I. T., Willham, R. L., and Whatley, J. A. Jr. 1967. A study of some genetic parameters in purebred and crossbred populations of swine. *J. Anim. Sci.* 26:16-20. (ABA 35:2756)
- Stanley, Gerald D. 1967. Influence of expanded corn, oats, oat component and a roughness factor on the occurrence of esophagogastric ulcers in swine. M.S. Thesis, Purdue U. Libr., Lafayette.
- Stedham, M. A., Kelley, D. C., and Coles, E. H. 1967. Influence of dietary sugar on growth of Candida Albicans in porcine digestive tract and lesions in esophageal area of stomach. *Amer. J. Vet. Res.* 28:153-159.
- Stein, J. S. 1967. Pork image would improve if odour rule is revised. *Natl. Provis.* 10/28/67. p. 17.
- Steinbach, J., Smidt, D., and Scheven, B. 1967. Investigation of the maternal influence on pre-and post-natal growth in pigs of extremes in size. II. Growth of Improved Landrace and Gottingen dwarf pigs following reciprocal transplantation of fertilised ova. *Eng. Sum. (Ger.) Z. Tierzucht. ZuchtBiol.* 83:312-330. (ABA 36:1712).
- Steinegger, P. 1967. Results of carcass quality tests on pigs and the possibilities for their use in breeding practice. *Eng. Sum. (Ger.) Schweiz. Landwirt. Forsch.* 6(1):1-33.
- Steinhardt, M., and Studzinski, T. 1967. Peculiarities and limites of cardiac circulation and respiration functions of pigs in thermoregulation. *Eng. Sum. (Ger.) Mon.H. Vet.Med.* 22(24):985-992.
- Steinhardt, M., Studzinski, T., Lyhs, L., and Glowatzki, R. 1967. Blood volume changes in domestic pigs in case of exogenous hyperthermia. *Eng. Sum. (Ger.) Arch. Expt. Vet. Med.* 21(5):1257-1265.
- Sterba, O. 1967. Morphogenesis of m. trapezius and m. sternocleidomastoideus in the domestic pig. *Acta. U. Agr. Fac. Vet. Brno*, 36:489-498.
- Stevens, A. J. 1967. The thin sow syndrome. *Agr.* 74(11):510-514.
- Stevens, K. R. 1967. Detection of LH-releasing factor (pig). *Diss. Abs.* 28:1680B.



1967

- vermer, E. J. 1967. How many litters can you raise? Hog Farm Mgt. 4(5):44.
- vermer, E. J. 1967. Buying a tested boar? Hog Farm Mgt. 4(11):33, 41.
- vermer, E., and Hofmeyer, K. 1967. How to produce more top grade hogs. Wallace's Fmr. 92(20):32-33.
- wart, P. R., and Quayle, J. R. 1967. A synergistic decarboxylation of glyoxylate and 2-oxoglutarate by an enzyme system from pig-liver mitochondria. Biochem. J. 102:885-897.
- nson, C. G., Deman, J. M., and Bowland, J. P. 1967. Fatty acid composition and glyceride structure of piglet body fat from different sampling sites. J. Amer. Oil Chem. Soc. 44(4):253-255.
- nson, C. G., Deman, J. M., and Bowland, J. P. 1967. Glyceride structure of sows' milk and colostrum fat. J. Dairy Sci. 50(4): 572-575.
- uffer, J. R., and Burgkart, M. 1967. Investigations on the estimation of carcass composition in Yorkshire pigs. Eng. Sum. (Ger.) Zucht.K. 39(2):106-116. (ABA 36:560).
- rafuss, A. C., Dommert, A. R. and Tumbleson, M. F. 1967. Melanoma in a miniature piglet. A case report. Mo. Vet. 16(2):19.
- rafuss, A. C., and Zimmermann, W. J. 1967. Hematologic changes and clinical signs of trichinosis in pigs. Amer. J. Vet. Res. 28(124): 833-838.
- rong, D. H., and Ripp, N. M. 1967. Effect of cookery and holding on hams and turkey rolls contaminated with *Clostridium perfringens*. Appl. Microbiol. 15(5):1172-1177.
- rother, M. 1967. What I want in a production testing boar. (Breeder) Testing Wkshp. 7. Proc. 10th Natl. Pork Indus. Conf. Nov. 9-10. Lincoln.
- runz, K., Spaarmann, W., and Lenkeit, W. 1967. N and ether extract in bodies of piglets under defined feeding conditions. 1. Total N and total ether extract content of the body. 2. Distribution of N and ether extract in the body dissected into 9 fractions. 3. Increases in amounts of N and ether extract in the 9 body fractions. Eng. Sum. (Ger.) Z. Tierphysiol. Tierernahr. Futtermittelk. 22:82-93, 93-104; 104-114.



1967

- Strunz, K., Spaarmann, W., and Lenkeit, W. 1967. The content of nitrogen and ether extract in piglet bodies under definite feeding conditions. II. Distribution of nitrogen and ether extract of the nine fractionally divided carcasses. Eng. Sum. (Ger.) Z. Tierpsychol. 22:93-104.
- Studzinski, T., and Steinhardt, M. 1967. Peculiarities and limitations of the anioncation regulation in the thermo-regulation of pigs. Eng. Sum. (Ger.) Mon.H. Vet.Med. 22(18):744-749.
- Suteanu, M., Poll, E., and Suteanu, E. 1967.  $Fe^{59}$  passage through the placental filter and mammary gland of the sow and its dynamics in the tissues of new-born pigs. Eng. Sum. (Rum.) Lucr. Sti. Inst. Agron. N. Balcescu. G. (Bucharest). 9:465-471.
- Suvakov, D. 1967. Prolapsus uteri in sows after cesarean section. Eng. Sum. (Ser.) Veterinaria (Sarajevo) 16(4):555-556.
- Svajgr, A. J., and Zimmerman, D. R. 1967. Interval vs. daily feeding for sows. Abs. J. Anim. Sci. 26:1466.
- Sviben, M., Herak, M., and Salehar, A. 1967. The service period for sows suckling piglings for various periods. Eng. Sum. (Ser.) Stocarstvo 21:393-402. (Zagreb) (ABA 36:2848).
- Swain, James Warren. 1967. Volatile chemical compounds derived during heating of freeze-dried, lipid extracted and fat containing rehydrated pork muscle. M.S. Thesis, N. C. State U. Libr., Raleigh.
- Swanson, P. L., and Dutt, R. H. 1967. Effects of injected progestogens on the sexual and carcass characteristics of boars. Prog. Rpt. Ky. Agr. Expt. Sta. No. 170:64-66. (ABA 36:561).
- Swierstra, E. E. 1967. Semen characteristics in young Yorkshire and Lacombe boars. Proc. 16th Annu. Meet, U. Manitoba, June 27-30th. Canad. Soc. of Anim. Prod.
- Swierstra, E. E. 1967. Duration of spermatogenesis in the boar. (Abs.) J. Anim. Sci. 26:952-953.
- Swierstra, E. E., and Rahnefeld, G. W. 1967. Semen and testis characteristics in young Yorkshire and Lacombe boars. J. Anim. Sci. 26:149-157. (ABA 35:2784).
- Swiger, L. A. 1967. Where do we go from here? 30th Annu. Rpt. and Rec. Proc. Conf. Collab. Reg. Swine Breed. Lab., Stillwater, Okla. p. 16.
- Swiger, L. A., and Harvey, W. R. 1967. Selection for lean growth and percent lean cuts in swine. Res. Rpt. Ohio Agr. Res. Dev. Cent. Wooster. Anim. Sci. May, 1967, pp. 38-39.



1967

- iger, L. A., and Harvey, W. R. 1967. Swine breeding research (H323) Research at the Western Branch. Ohio Agr. Res. Dev. Cent. Wooster, Res. Summ. 23 Sept. pp. 34-35.
- oesma, W., and Van Logtestijn, J. G. 1967. Rigor mortis and meat quality. Eng. Sum. (Ger.) Fleischwirtschaft 47(4):408-410.
- rinek, F. 1967. Saving of nutrients in the case of a shortened sucking period of piglets. Eng. Sum. (Cz.) Zivoc. Vyr. 40(7):549-554.
- entkuti, L. 1967. The sex odor problem of boars. Eng. Sum. (Ger.) Deut. Tierarztl. Wchn.Schr. 74(5):117-118.
- ilvassy, B., and Bergfeld, J. 1967. Investigations on the immuno-chemical detection of the follicle stimulating hormone (FSH) of the pituitary gland. Eng. Sum. (Hu.) Magyar Allat. Lapja (Budapest) 22(10):455-456.
- umowski, P., Vaissaire, J. F., and Theret, M. 1967. Effect of the anabolic steroid R. 1881 on growth and fattening of young pigs. Eng. Sum. (Fr.) Recueil Med. Vet. 143:343-355.
- ssell, R. 1967. Effects of diet on reproduction in pigs, sheep and cattle. 1. Plane of nutrition in pigs. Brit. Vet. J. 123: 76-84.
- ssell, R. 1967. The effect of diet on reproduction in pigs, sheep and cattle. 2. Pigs: protein, fat, vitamins, minerals and other dietary substances. Brit. Vet. J. 123(4):170-176.
- ylor, A. McM., and Walters, C. L. 1967. Biochemical properties of pork muscle in relation to curing. Part II. J. Food Sci. 32(3): 261-268.
- ylor, J. A., and Copland, A. N. 1967. An investigation into the blood supply to the epiphyses of the long bones. Royal (Dick) Schl. of Vet. Studies, U. Edinburgh, Edinburgh, Scotland. PIDA Index of Pig Res. London, pp. 54-56.
- ague, H. S., and Grifo, A. P. Jr. 1967. Swine reproduction. Ohio Agr. Res. & Dev. Cntr. Wooster, Animal Sci. Res. Rpt. May. pp. 16-17.
- ague, H. S., and Grifo, A. P. Jr. 1967. Effect of reduced feed intake on sow performance (S349). Research at the Western Branch (South Charleston). Ohio Agr. Res. & Dev. Cntr. Wooster Res. Sum. #23. Sept. pp. 36-40.



1967

- Teague, H. S., Kunkle, L. E., Cahill, V. R., Moxon, A. L., Grifo, A. P. Jr., and Plimpton, R. F. 1967. Measurement of, and ways of affecting, sex influenced performance of growing-finishing swine. Res. Rpt. Ohio Agr. Res. Dev. Cent. Wooster. Anim. Sci., May 1967 pp. 17-19.
- Teague, H. S., Roller, W. L., and Grifo, A. P. Jr. 1967. The effect of high temperature and variable humidity on the reproductive performance of gilts. Ohio Agr. Res. Dev. Cent. Wooster Res. Summ. pp. 5-7.
- Tegeler, G., and Schulke, B. 1967. Occurrence of C-21 steroids in boar's urine. Arch. Expt. Vet. Med. 21:777-788.
- Terblanche, J., Peacock, J. H., Bowes, J., Davies, R. P., Tierris, E. J. Palmer, D. B. and Hunt, A. C. 1967. The use of the pig as an experimental animal for orthotopic liver homotransplantation. Brit. J. Surg. 54:231.
- Thomke, S., Pira, C., and Persson, K. A. 1967. The effect of feeding storage-deteriorated and normal barley, soaked and unsoaked, on the growth and carcass quality of pigs. Acta. Agr. Scand. 17:17-24.
- Thompson, J. E., and Karmas, E. 1967. Physical and chemical relationships between hog carcass, bacon belly and processed bacon. (Abs. Food Trade Rev. 37(7):47.
- Thorpe, E., and Thomlinson, J. R. 1967. Autolysis and post-mortem bacteriological changes in the alimentary tract of the pig. J. Path. and Bact. 93(2):601-610.
- Thrasher, D. M., Vincent, C. K., Scott, V. B., and Mullins, A. M. 1967. Effects of a hormone combination on the feedlot, carcass and reproductive performance of pigs. (Abs.) J. Anim. Sci. 26:911.
- Thurley, D. C. 1967. Locomotor disturbances. Vet. Rec. 80(25):9-11.
- Thurley, D. C. 1967. Muscle development and leg weakness in the pig. Deut. Tierarztl. Wchn.Schr. 74(13):336-338.
- Thurley, D. C., Gilbert, F. R., and Done, J. T. 1967. Congenital splayleg of piglets: myofibrillar hypoplasia. Vet. Rec. 80(9): 302-304. (ABA 35:2757).
- Thurley, D. C., and Saunders, R. W. 1967. Leg weakness investigation. Cent. Vet. Lab., New Haw, Weybridge Min. Agr. Fish & Food, Surrey. PIDA Index of Pig Res. London, Jan. pp. 18.



1967

- Phonov, V. N. 1967. Studies on blood group factors for genetical analysis of selection processes. Proc. 10th Europ. Conf. Anim. Blood Groups Biochem. Polymorph, Paris, 1966:175-179. (ABA 36:590).
- Phonov, V. N., and Burlak, Z. K. 1967. Polymorphism concerning the antigens of the blood and sexual components as a cause of decreased fertility in animal crossbreeding. (pig). (Abs.) Proc. Internatl Symp. on Immunol. of Spermatozoa & Fertilization. 27-29. Sept. 67. Center Agr. Sci. Tech. Inf. Dragan Tsankov 6, Sofia, Bulgaria. p. 61-62.
- Illson, S. A., and Erb, R. E. 1967. Progesterone concentration in peripheral blood plasma of the domestic sow prior to and during early pregnancy. J. Anim. Sci. 26:1366-1368.
- Ing, K. C. 1967. The effects of varying water and protein intake on some aspects of body metabolism in swine reproduction. M.S. Thesis, U. Manitoba.
- dd, A. C. E., and Daniels, L. J. 1967. The performance and carcass quality of pigs fed liver meal as a protein supplement from weaning to bacon weight. Austral. J. Expt. Agr. Anim. Husb. 7(28):408-411.
- hara, S. 1967. Pig improvement with special reference to the number of vertebrae-variation of the number of vertebrae in pigs. Jap. Agr. Res. Q. 2(1):29-34. (ABA 36:3796).
- dorov, A., and Petrov, J. 1967. Development of structural elements of muscular tissue by pigs of Bulgarian White and Landrace breeds and their crosses. Zhivotn. Nauki (Sofia) 4, (6), 53.
- mov, Vl. 1967. Relationship between carcass length and other carcass indices in Bulgarian White pigs. Zhivotn. Nauki, (Sofia) 4(4), 73.
- mpkins, E. C. 1967. The effects of elevated ambient temperatures on embryonic mortality in swine and rats. Diss. Abs. 27(7):2501B.
- mpkins, E. C., Heidenreich, C. J., and Stob, M. 1967. Effect of post-breeding thermal stress on embryonic mortality in swine. J. Anim. Sci. 26:377-380. (ABA 35:3873).
- pel, D. G., and Merkel, R. A. 1967. Effect of exogenous prednisolone and methylprednisolone upon plasma 17-hydroxycorticosteroid levels and some porcine muscle characteristics. J. Anim. Sci. 26:1017-1023.
- pel, D. G., Merkel, R. A., and Wismer-Pedersen, J. 1967. Relationship of plasma 17-hydroxycorticosteroid levels to some physical and biochemical properties of porcine muscle. J. Anim. Sci. 26(2):311-315.



1967

- Tormo, J., Chordi, A., Rodriguez-Burgos, A., and Diaz, R. 1967. Immuno-electrophoresis of normal pig serum. Vet. Rec. 81(16):392-395.
- Tribble, R. L. 1967. Alteration of corpus luteum function in the cycling and unilaterally pregnant pig. M.S. Thesis, U. Nebr. Libr., Lincoln.
- Triebler, G. 1967. Studies on the crossbreeding of pigs and possibilities of utilizing the effects of crossbreeding. Eng. Sum. (Ger. Wiss. Z. Humboldt, U. Math-Nat. Wiss. 16(4):577-585.
- Trofimenko, A. L. 1967. The cytochemical and morphological variation of spermatozoa in boars. Eng. Sum. (Russ.) Tsitol. Genet. 1(3):65-68. (ABA 36:634).
- Tu, C., Pomrie, W. D., and Fennema, O. 1967. Free and esterified cholesterol content of animal muscles and meat products. J. Food Sci. 32(2):30-34.
- Tumbleson, M. F., Dommert, A. R., and Middleton, C. C. 1967. Occurrence of melanotic lesions resulting from selective breeding of miniature swine. Midwest Interprofessional Seminar on Diseases common to animals and man. p. 9. (Abs.)
- Tumbleson, M. E., Dommert, A. R., and Middleton, C. C. 1967. Comparative study of serum proteins and hematologic parameters in miniature and conventional swine. (Abs.) J. Anim. Sci. 26:911.
- Tuomy, J. M., and Helmer, R. L. 1967. Effect of freeze-drying on the quality of the longissimus dorsi muscle of pork. Food Technol. 21(4):167-169.
- Twiehaus, M. J. 1967. Stomach ulcers in swine. U. Nebr. Anim. Sci. Dept. Swine Prog. Rpt. 378. pp. 6-7.
- Ulberg, L. C. 1967. Embryonic mortality. Reprod. Wkshp. #9. Proc. 10th Natl. Pork Indus. Conf. Nov. 9-10. Lincoln.
- Ulbrich, F. 1967. Several years of serological examinations for Aujeszky's disease in two pig fattening farms. Eng. Sum. (Ger.) Mon.H. Vet. Med. 22(12):495-497.
- Ullrey, D. E., Milier, E. R., Brent, B. E., Bradley, B. L., and Hoefer, J. A. 1967. Swine hematology from birth to maturity. IV. Serum calcium, magnesium, sodium, potassium, copper, zinc and inorganic phosphorus. J. Anim. Sci. 26:1024-1029.
- Usborne, W. R., Kemp, J. D., and Moody, W. G. 1967. The relation of protein components to pork quality. (Abs.) J. Anim. Sci. 26:212.



1967

- orne, W. R., Kemp, J. D., and Moody, W. G. 1967. Relation of certain protein components and free amino acids to quality of porcine muscle from five different weights of hogs. Ky. Anim. Sci. Res. Rpt. 170. p. 87.
- enta, M., Hyldgaard-Jensen, J., and Moustgaard, J. 1967. Three lactic dehydrogenase isoenzyme systems in pig spermatozoa and the polymorphism of sub-units controlled by a third locus C. Nature, London 216:506-507. (ABA 36:1715).
- derWal, R. J., Ast, H. J., and Hegarty, G. R. 1967. The isolation and characterization of pork skeletal muscle sarcolemma. Proc. 20th Annu. Recip. Meats Conf. June 14-16, Lincoln, Nebr. 20:108.
- Leon, A., and Molenaar, B. A. J. 1967. A behavioural study with pigs. An exact method for determining the pattern of development of teat choice by piglings. Eng. Sum. (Du.) Tijdschr. Diergeneesk. 92:297-307. (ABA 35:2771).
- Logtestijn, J. G. 1967. Post mortem pH behaviour in the meat of animals. Eng. Sum. (Ger.) Fleischwirtschaft 47(3):240-246.
- Logtestijn, J. G., and Sybesma, W. 1967. Muscle and meat degeneration in pigs. Eng. Sum. (Ger.) Deut. Tierarztl. Wchn.Schr. 74(15): 377-385.
- Nie, C. J. 1967. Vascular rings. Anomalies of the 4th aortic arch in a pig and a cow. Eng. Sum. (Du.) Tijdschr. Diergeneesk. 92: 308-319.
- nschoubroek, F., and De Wilde, R. 1967. A comparison of tylosin and oxytetracycline as a feed additive for fattening pigs. Eng. Sum. (Flem.) Vlaams Diergeneesk. Tijdschr. 36(6):281-289.
- nschoubroek, F., De Wilde, R., and Lampo, P. 1967. The quantitative effects of feed restriction in fattening pigs on weight gain, efficiency of feed utilisation and backfat thickness. Anim. Prod. 9(1):67-74.
- nschoubroek, F., and Symoens, J. 1967. The influence of early administration of Fe on weight gain and on intake and utilisation of sow's milk and creep feed by sucking piglets. Eng. Sum. (Ger.) Z. Tierphysiol. Tierernahr. U. Futtermittelk. 22:133-140.
- nschoubroek, F., and Van Spaendonck, R. 1967. The weaning of piglings at 6 weeks of age. Eng. Sum. (Flem.) Vlaams Diergeneesk. Tijdschr. 36(9/10):377-389. (ABA 37:653).



1967

- Van Stavern, B. D., and Bruner, W. H. 1967. Appraising market hogs, for carcass merit. Ohio State U. Ext. L. 139, 8 p.
- Varney, W. Y. 1967. Pork carcass evaluation. Ky. U. Ext. C.614, 12 p.
- Vassileva-Popova, J. 1967. Localization of ultrastructural deformation in spermatozoa using photodynamic effect. (boar). (Abs.) Proc. Internatl. Symp. on Immunol. of Spermatozoa and Fertilization. 27-29 Sep. 67. Center Agr. Sci. Tech. Inf. Dragam Tsankov 6, Sofia, Bulgaria pp. 91-92.
- Vasileva-Popova, Ju. and Tsocheva, P. 1967. Comparative studies on the buffer capacity of semen diluents and bull and boar semen. Vet. M. Nauki, (Sofia)4: 31.
- Venzarova, L. 1967. Changes in the body size and live weight of pigs during rearing. Acta U. Agr. Fac. Agron. Brno. 15:713-725. (ABA 36:3832).
- Vera Cruz, N. C. 1967. Collecting semen from boars with a modified artificial vagina. Philipp. J. Anim. Ind. 22(1961):195-197. (ABA 36:635).
- Veum, T. L., Pond, W. G., and Van Vleck, L. D. 1967. A note on correlations between milk production and composition of sows and the growth and haemoglobin of their pigs. Anim. Prod. 9:251-253. (ABA 35:2737).
- Veum, T. L., Walker, E. F. Jr., and Pond, W. G. 1967. Effect of frequency of meal intake on carcass composition of swine. (Abs.) J. Anim. Sci. 26:882.
- Veznik, Z. 1967. The early diagnosis of pregnancy in sows by a histocytological method. Eng. Sum. (Cz.) Vet. Med. (Praha) 12(5):241-245. (ABA 35:3875).
- Vigario, J. D., Relvas, M. E., Ferraz, F. P., Ribeiro, J. M., and Pereira, C. G. 1967. Identification and localization of genetic material-African swine fever virus by autoradiography. Virology 33(10:173-175).
- Vogt, D. W. 1967. Chromosome condition of two atresia ani pigs. J. Anim. Sci. 26:1002-1004. (ABA 36:592).
- Von Catron, D. 1967. Future contributions of pork to human nutrition. Internatl. Cong. Nutr. Proc. 7th Cong. v. 4:901-902.



1967

- banac, I. 1967. Observations on "trembling" in newborn piglings. Preliminary report. Eng. Sum. (Ser.) Vet. Glasnik 21:69-72. (ABA 35:3853).
- chlabsky, J. 1967. The effect of watering on carcass yields of swine. Eng. Sum. (Cz.) Zpravod. Masneho Prum. 3:28-35.
- isman, J., and Carnes, W. H. 1967. Cardiovascular studies on copper-deficient swine. X. Amer. J. Path. 51(1):117-123.
- ite, A. B., and Day, B. N. 1967. Intrauterine migration following unilateral fertilization in gilts. J. Anim. Sci. 26:790-791. (ABA 36:612).
- itt, W. P., Baker, D. H., Jordan, C. E., and Meyer, D. L. 1967. Effect of oral diethylstilbestrol plus methyltestosterone on reproductive performance of gilts. (Abs.) J. Anim. Sci. 26:1497-1498.
- lker, D. 1967. Diagnosis of pregnancy in pigs by examination of vaginal mucosae. Vet. Rec. 81:648-652. (ABA 36:1731).
- lker, J. S., Klein, F., Lincoln, R. E., and Fernelius, A. L. 1967. A unique defense mechanism against anthrax demonstrated in dwarf swine. J. Bact. 93(6):2031-2032.
- alkowski, L. 1967. Quality and fertility of boar semen. Eng. Sum. Zesz. Prob. Postep. Nauk, Roln. (Warsaw) 67(5):255-259.
- allace, H. D., and Combs, G. E. 1967. The influence of level of feeding during late gestation on pig birth weights and sow performance during lactation. Fla. Anim. Sci. Mimeo Ser. AN 67-9.
- allace, H. D., Demaree, M. E., and Combs, G. E. 1967. Sow productivity as influenced by season (a summary of five years data). Fla. Anim. Sci. Mimeo Ser. AN 68-2.
- allace, H. D., Palmer, A. Z., Carpenter, J. W., Britt, L. A., Warnick, A. C., and Combs, G. E. 1967. Influence of protein level and hormone supplementation during the finishing period on feed-lot performance, carcass characteristics and pork acceptability. Fla. Anim. Sci. Mimeo Series AN 67-10.
- allace, H. D., Palmer, A. Z., Carpenter, J. W., and Combs, G. E. 1967. Influence of protein level and hormone on pigs. (Abs.) J. Anim. Sci. 26:216.
- allin, R. F. 1967. Porcine gastric secretory responses and ulcerogenic properties of swine reactions. Diss. Abs. 27B, 2501.



1967

- Wallize, J., Hazen, T. E., Speer, V. C., and Switzer, W. P. 1967. Swine in confinement; the story of a "model". Iowa Farm Sci. 22(1): 3-18.
- Walters, C. L., Casselden, R. J., and Taylor, A. McM. 1967. Nitrite metabolism by skeletal muscle mitochondria in relation to haem pigments. Biochim. Biophys. Acta. 143:310.
- Ward, D. N., Adams-Mayne, M., Ray, N., Balke, D. E., Coffey, J., and Showalter, M. 1967. Comparative studies of luteinizing hormone from beef, pork, and sheep pituitaries. 1. Purification and physical properties. Gen. & Compar. Endocrinol. 8(1):44-53.
- Ward, D. N., Fujinom, Showalter, M., Ray N. 1967. Comparative studies of luteinizing hormone from beef, pork, and sheep pituitaries. 2. The C-terminal amino acids. Endocrinol. 8:289-296.
- Ward, J. 1967. Index of Scientific and Economic Studies of particular significance to the pig industry of the United Kingdom, Part VI. U. Aberdeen, Dept. Agr. Misc. P. #7. (ABA 36:1641).
- Wartenberg, L. 1967. Effect of pH on auto-oxidation of emulsified pork fat. Eng. Sum. (Pol.) Roczn. Wyzsz. Szk. Roln. Weter. 20:187-197.
- Wastell, M. E., Ewan, R. C., Bicknell, E. J., Hays, V. W., and Speer, V. C. 1967. Effect of vitamin E and selenium on blood and tissue composition of the young pig. (Abs.) J. Anim. Sci. 26:1474.
- Watkins, J. L., Sherritt, G. W., and Ziegler, J. H. 1967. Predicting body tissue characteristics using ultrasonic techniques. J. Anim. Sci. 26(3):470-473.
- Weiner, P. D., and Pearson, A. M. 1967. Effects of EDTA on postmortem changes in muscle. (Abs.) J. Anim. Sci. 26:903.
- Weniger, J. H., Steinhauf, D., Saaler, H., and Holtz, A. 1967. Investigations on the relation between meat quality and fattening performance and carcass value in the pig. Eng. Sum. (Ger). Zucht.K. 39:95-105. (ABA 36:566).
- Weniger, J. H., Kallweit, E., Steinhauf, D., and Glodek, P. 1967. Influence of growth on the weights of cut and carcass measurements in pigs. Eng. Sum. (Ger.) Zucht.K. 39:187-199. (ABA 36:1684).
- Weniger, J. H., Steinhauf, D., Glodek, P., and Weiss, F. K. 1967. Some meat quality characters in pigs, their heritability, relation to other production characters and dependence upon climate. Eng. Sum.(Ger.) ZuchtK. 39:332-345. (ABA 36:2805)



1967

- (1) Weseloh, E., and Smidt, D. 1967. Observations on trans-uterine migration of embryos in German Improved Landrace pigs and miniature pigs. Eng. Sum. (Ger.) Zuchtungskunde 39:371-377. (ABA 36:2851).
- Wesley, F. 1967. Stereotypy and teat selection in pigs. Z. Saugetierk 32:362-366. (ABA 36:1642).
- Westmoreland, N., First, N. L., and Hoekstra, W. G. 1967. In-vitro uptake of zinc by boar spermatozoa. J. Reprod. & Fertil. 13:223-228. (ABA 35:3893).
- White, L. G., Quinn, P. J., Murdoch, R. N. 1967. Studies of the cations in semen (hog). Proc. 8th Internatl. Conf. Internatl. Planned Parenthood Fed. 9-15 Apr. 67, Santiago.
- White, P. 1967. Breeding America-style. Pig Fmg. 15(12):51-52.
- Widdowson, R. W. 1967. Better breeding; the effects of genetics. Pig Fmg. 15(10):41, 43, 47.
- Widdowson, R. W. 1967. Picking out the winners. Pig Fmg. 15(11):29, 31.
- Widdowson, R. W. 1967. Testing on the farm-better breeding. Pig Fmg. 15(12):36-37.
- Willemse, A. H. 1967. The relationship between the time of ovulation and the duration of oestrus in gilts. Eng. Sum. (Du.) Tijdschr. Diergeneesk. 92:1144-1148. (ABA 36:613).
- Willemse, A. H., and Boender, J. 1967. The relation between the time of insemination and fertility in gilts. Tijdschr. Diergeneesk. 92(1):18-34. (ABA 35:1698).
- Williams, P. J. 1967. Superior pork carcasses would get new No. 1 grade. Agr. Mktg. (Washington) 12(10):10.
- Wilson, B. R. 1967. Characteristics of commercially graded pig carcasses and their relationships to appraisal system standards. Austral. J. Expt. Agr. Anim. Husb. 7(25):152-156. (ABA 35:3804).
- Witt, M., Schroder, J., and Andreae, V. 1967. The effect of different amounts of feed on the feed conversion, the carcass quality and carcass measurements of pigs of the same age. Eng. Sum. (Ger.) Fleischwirtschaft 47(3):248-253.



1967

- Witt, M., Schroder, J., and Mehden, H. V. D. 1967. The influence of the growth and the quality of the carcasses of swine of fishmeal, soybeanmeal and fresh water algae (*Scenedesmus obliquus*) when used as a protein supplement. Eng. Sum. (Ger.) Landwirt. Forschung. 20(1):62-71.
- Witters, W. L. 1967. Metabolic pathways of washed porcine spermatozoa. Diss. Abs. 28:2206B.
- Witters, Weldon Laverne. 1967. Investigations into the metabolic pathways of washed porcine spermatozoa. Ph.D. Thesis, Purdue U. Libr., Lafayette.
- Wohlken, E. 1967. Analysis of the cyclical changes in the number of pregnant sows. Eng. Sum. (Ger.) Agrarwirtschaft 16(8):253-264.
- Woltersdorf, W., and Linke, H. 1967. The connective tissue content of pork and beef carcasses. II. The meaning of 'coarse sinew'. Fleischwirtschaft 47(6):587-589.
- Wood, R. D., Chaney, C. H., and Waddill, D. G. 1967. Effects of protein level and source on the serum protein profile of sows and their pigs. Ky. Anim. Sci. Res. Rpt. 170. p. 45.
- Wood, R. D., Chaney, C. H., and Waddill, D. G. 1967. Effect of dietary protein on the serum protein profile of sows and their pigs. (Abs.) J. Anim. Sci. 26:216-217.
- Wood, R. D., Chaney, C. H., Waddill, D. G., and Dutt, R. H. 1967. Influence of PMS on the reproductive performance of gilts. (Abs.) J. Anim. Sci. 26:231.
- Woody, C. O., First, N. L., and Pope, A. L. 1967. Effect of exogenous progesterone on estrous cycle length. J. Anim. Sci. 26:139-141.
- Woolf, S. 1967. Radiation genetics. Annual Review of Genetics. Vol. I. pp. 221-244.
- Wurziger, J. 1967. The examination and judging of pork fat. Eng. Sum. (Ger.) Fleischwirtschaft. 47(12):1355-1357.
- Wyllie, D., Speer, V. C., Hays, V. W., and Ewan, R. C. 1967. Effect of early nutrition on subsequent performance and carcass quality. (Abs.) J. Anim. Sci. 26:1477-1478.
- Wysong, Max Leroy. 1967. Study of the effects of cooked soybeans on the performance and carcass characteristics of growing-finishing swine. An evaluation of limited feeding and wet feeding. M.S. Thesis, Purdue U. Libr., Lafayette.



1967

- Young, E. P., and Bounds, W. R. 1967. Further studies of early nutritional influences on swine carcass characteristics. Proc. Md. Nutr. Conf. Feed. Mfrs. 1967: pp. 64-67.
- Young, R. A. 1967. A.I. in swine-the present and immediate future. Southern Ill. U. Sch. Agr. Anim. Indus. P. 10:30-31.
- Yuki, S., Hadi, A., and Manjreker, S. L. 1967. A study on certain biometrical norms of porcine uteri. Indian Vet. J. 44:500-504. (ABA 36:614).
- Zlewski, S., and Gaddis, A. M. 1967. Effect of transesterification of lard on stability, antioxidant-synergist efficiency, and rancidity development. J. Amer. Oil Chem. Soc. 44(10):576-580.
- Zeller, M., and Renz, H. 1967. Investigations on the spoilage of raw hams. Eng. Sum. (Ger.) Fleischwirtschaft 47(8):825-828.
- Zelnik, J., and Granat, J. 1967. The relation between the size of the fat cells of the lard and the fat and lean cuts of Improved White pigs. Eng. Sum. (Cz.) Pol'nohospodarstvo 13:47-51. (ABA 35:2733).
- Zerobin, K. 1967. Oxytocin (Syntocinon) administration in swine obstetrics. Eng. Sum. (Ger.) Schweiz. Arch. Tierheilk. 109(11): 581-587.
- Zimmerman, D. R. 1967. Synchronization of heat in gilts. U. Nebr. Swine Prog. Rpt. 378. pp. 15-16.
- Zimmerman, D. R. 1967. Synchronization of estrus. Reprod. Wkshp. #9. Proc. 10th Natl. Pork Indus. Conf. Nov. 9-10. Lincoln.
- Zimmerman, D. R., Peo, E. R., and Hudman, D. B. 1967. Plant vs. animal protein as a source of supplemental protein for the gilt. J. Anim. Sci. 26(3):514-517.
- Zimmerman, D. R., and Tribble, R. L. 1967. Influence of gonadal hormones in the cycling and unilaterally pregnant pig. (Abs.) J. Anim. Sci. 26:1498-1499.
- Zivkovic, S., Jovanovic, B., Pejin, S., and Bozickovic, S. 1967. The growth of weaned baby pigs fed with feed concentrates of different composition at the age of four to eight weeks. Eng. Sum. (Ser.) Sav. Poljopr. 15(3):207-212.
- Zobrisky, S. E. 1967. Tentative pork carcass evaluation procedures. Proc. North Central Reg. Livestk. Specialist Conf.,



1967

- Zobrisky, S. E., Hunziger, G. D., and Tribble, L. F. 1967. Longissimus muscle area development in swine. (Abs.) J. Anim. Sci. 26:1470.
- Zommere, A. 1967. Genalogical structure of the Latvian White pig herds at the Imant Sudmalic collective farm in the Liepaia district. Eng. Sum. (Lat.) Latv. Lopkop. Vet. Zinat. Petniac. Inst. Raksti. Riga, 20:203-216. (ABA 37:2685).
- Zubak, M. 1967. Comparative histological investigations of the small intestine in swine. Eng. Sum. (Ser.) Veterinaria (Sarajevo) 16(4): 473-478.
- Zusman, P. 1967. A theoretical basis for determination of grading and sorting schemes. J. Farm Econ. 49:89-106.



1968

- berle, E. D., and Merkel, R. A. 1968. Physical and biochemical properties of porcine muscle as affected by exogenous epinephrine and prednisolone. J. Food Sci. 33(1):43-47.
- berle, E. D., and Merkel, R. A. 1968. 5'-adenylic acid deaminase in porcine muscle. J. Food Sci. 33(1):27-29.
- Amesteanu, I., Amesteanu, C., Salantiu, V., Baba, I., and Ghergariu, S. 1968. Anatomical and clinical study of the trembling baby pigs. Eng. Sum. (Rum.) Lucr. Sti. Inst. Agron. "Dr. Petru Groza". 21:89-94.
- Amad, N., and Gower, D. B. 1968. Biosynthesis of some androst-16-enes from C<sub>21</sub> and C<sub>19</sub> steroids in boar testicular and adrenal tissue. Biochem. J. 108:233-241.
- Atkins, E. L., Mathis, P. D., Morrisette, M. C. 1968. Rate of progesterone biosynthesis in the perfused porcine ovary. (Abs.) J. Anim. Sci. 27:1187.
- Atkins, E. L., and Morrisette, M. C. 1968. Gross ovarian changes during estrous cycle of swine. Amer. J. Vet. Res. 29(10):1953-1957.
- Blanko, M. 1968. Effect of sperm concentration on fertilization in the sow. Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche Agron. France. p. 310. (ABA 37:684).
- Blanko, M., and Moberg, R. 1968. The post-inseminative sperm concentration in oviduct and the fertilization of ova after artificial insemination of sows. Eng. Sum. (Ger.) FortPfl. Besam. Aufzucht. Haust. 4(1):16-20.
- Abrecht, J. E., Clawson, A. J., Ulberg, L. C., and Smith, F. H. 1968. Effects of high gossypol cottonseed meal on the electrocardiogram of swine. J. Anim. Sci. 27(4):976-980.
- Adinger, S. M. 1968. Conducting palatability trials in swine. Feedstuffs 40(2):18, 20.
- Allen, C. E. 1968. Fat deposition in the porcine animal. Proc. 21st Annu. Recip. Meat Conf. July 1-3, 1968. Athens, Ga. pp. 306-319.
- Allen, D. M. 1968. Description of ideal carcasses. Proc. 21st Annu. Recip. Meat Conf. July 1-3, 1968. Athens, Ga. pp. 284-294.
- Allen, E. 1968. How research is affecting meat quality. Minn. Sci. 24(3):15.
- Abanelli, G., Molinari, C., Trasatti, U., and Pezzani, G. 1968. The ratio of phosphorus to proteins in ham. Eng. Sum. (It.) Industria deue Conserv 43(1):4-8.



1968

- Ambrose, B. J. 1968. Restaurateur's view on fresh and processed products. The Pork Industry: Problems and Progress, Iowa State U., Ames. pp. 22-25.
- Anand, A. S. 1968. Factors affecting the loss of DNA from spermatozoa. Diss. Abs. 28(11):4730B.
- Anand, A. S., and First, N. L. 1968. Effect of aging of boar semen on the DNA content of live and dead spermatozoa. Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recher. Agron. France. pp. 217. (ABA 37:730).
- Anderson, J. J. B. 1968. Effect of time on distribution of injected radio-strontium in the skeleton of young pigs. Health Physics 15, 237.
- Anderson, J. J. B. 1968. Urinary hydroxyproline excretion in swine as a function of age. Fed. Proc. 27:728.
- Anderson, L. J., and Jarrett, W. F. H. 1968. Lymphosarcoma (leukemia) in cattle, sheep and pigs in Great Britain. Cancer, N. Y. 22:398.
- Anderson, L. M., and Wahlstrom, R. C. 1968. Ultrasonic prediction of swine carcass composition. (Abs.) J. Anim. Sci. 27:1760.
- Anderson, M. D. 1968. Effect of furazolidone to swine at breeding. (Abs.) J. Anim. Sci. 27:1131.
- Andersson, I. 1968. The variation of the muscle colour of pigs in a progeny testing material. Eng. Sum. (Swe) Meddel Lantbr. Hogskol. A. 91.
- Andresen, E. 1968. Sequential analysis of genetic linkage in pigs. Aarsskr. K. Vet-og. Landbohojssk (Copenhagen) p. 111. (ABA 37:2729).
- Anon. 1968. Relation between gestation length of sows and size and viability of the litter. (bibliography 1942-68; 11 references). Commonwealth Bur. Anim. Breed. & Genetics. (Edinburgh).
- Anon. 1968. Marketing of livestock, meat, and meat products 1962 - June 1967. USDA Natl. Agr. Libr., Washington. Libr. List #92.
- Anon. 1968. Cross-sections show differences in meaty and average hogs. Wallace's Fmr. 93(8):34B:35 April.
- Anon. 1968. Symposium on factors producing embryonic and fetal abnormalities, death, and abortion in swine. Amer. Vet. Med. Assoc. J. 152(1):37-40.



1968

- Mon. 1968. Post-mortem changes in pig muscle. An Foras Taluntais. "Towards new Frontiers in Research" Annual Report 1966-67, Dublin.
- Mon. 1968. Quality differences in pigmeat. An Foras Taluntais. "Towards new Frontiers in Research" Annu. Rpt. 1966-67, Dublin.
- Mon. 1968. Minnesota swine producers improve pork through evaluation stations. Minn. Ext. Prog. Rpt. Anim. Sci. #11.
- Mon. 1968. Breeding hogs for more lean pork. Agr. Res. (Wash.) 17(1):7 July.
- Mon. 1968. Boars for bacon. An Foras Taluntais. "Towards new Frontiers in Research." Annu. Rpt. 1966-67, Dublin.
- Mon. 1968. Artificial breeding in farm animals. Proc. Conf. Artif. Breed. in Farm Anim. sponsored jointly by An Foras Taluntais and the Irish Genealogy soc. in Dublin, Mar. 3-4, 1967. An Foras Taluntais, 128 pp. (ABA 36:4209).
- Mon. 1968. Factors producing embryonic and fetal abnormalities, death, and abortion in swine. J. Amer. Vet. Med. Assoc. 1968 152(1):37-40.
- Mon. 1968. Index of pig research supported by PIDA. PIDA, London. (ABA 36:2765).
- Mon. 1968. How to profitably increase litter size. Fla. U. Ext. C. 320. 8 pp.
- Mon. 1968. Should hog producers breed lean or feed lean? Agr. Res. (Wash.) 17(1):6. (ABA 37:1667).
- Mon. 1968. Spotlight on tail biting. Pig Fmg. 16(9):63-65. Sept.
- Mon. 1968. Swine AI is catching on. Fmrs. Digest 32(3):79-80. Aug. Sept.
- Mon. 1968. Litters in a bunch. Fmrs. Digest 32(2):55-56. June-July.
- Mon. 1968. Use of miniature swine in research. Lab. Anim. Care, 18:97-126. (ABA 37:1140).
- Mon. 1968. Pork has improved. But consumers don't know it. Natl. Lvst. & Meat Bd., Chicago News.
- Mon. 1968. Should hog producers breed lean or feed lean. Agr. Res. (Wash.) 17(1):6 July.



1968

- Anon. 1968. Some heritable defects of swine. Amer. Hampshire Herdsman 43(7):88-89. July.
- Anon. 1968. Certification-Guide to Hampshire Progress. Amer. Hampshire Herdsman 43(7):126. July.
- Anon. 1968. Bio-active feeding of growing pigs. Annu. Rpt. W. Scot. Agr. Col. Anim. Husb. Dept., Auchincruive, Ayr. pp. 7-8.
- Anon. 1968. Development of artificial insemination. PIDA Index Pig Res. 1968. p. 13 Jan.
- Anon. 1968. Blood typing survey. PIDA Index Pig Res. 1968. p. 14. Ja.
- Anon. 1968. Selection for lean meat content and food conversion. Annu. Rpt. W. Scot. Agr. Col. Anim. Husb. Dept. Auchincruive, Ayr. p. 7.
- Anon. 1968. The pork chop is better. Agr. Sit. 52(7):8 July.
- Anthony, W. E. 1968. Structural changes in the federally inspected meat processing industry, 1961-64. USDA, Econ. Res. Serv., Agr. Econ. Rpt. No. 129.
- Apple, Kenneth L. 1968. Influence of age of dam and season on sow productivity and the correlation between the productivity of first and second litters in swine. M.S. Thesis, Okla. State U. Libr., Stillwater.
- Arganosa, F. C., and Henrickson, R. L. 1968. Variation of pigments in porcine muscle. Proc. Assoc. South. Agr. Wkrs. Annu. Conv. 65: 121.
- Arganosa, F. C., and Henrickson, R. L. 1968. Cure diffusion in pre- and post-chilled porcine muscle. Abs. J. Anim. Sci. 27:1138.
- Arganosa, Valentino Guiron, 1968. The influence of genetic factors on pork quality. Ph.D. Thesis, Okla. State U. Libr., Stillwater.
- Arganosa, V. G., Omtvedt, I. T., and Walters, L. E. 1968. Phenotypic and genotypic parameters of some carcass traits in swine. (Abs.) J. Anim. Sci. 27:283.
- Arnould, R. 1968. Selection in pigs. Eng. Sum. (Fr.) Agricultura (Lowain) 16(2):3-28. (ABA 37:665).
- Ashton, J., and Beaumont, J. A. 1968. A comparative study of alternative methods of integrating the production and marketing of pig meat. PIDA Index Pig Res. p. 58 Jan.



1968

- elsson, M. 1968. Sex chromatin in early pig embryos. *Hereditas* 60: 347-354.
- atunde, G. M., Pond, W. G., Walker, E. F. Jr., and Chapman, P. 1968. Effects of dietary safflower oil or hydrogenated coconut oil on heart, liver and adipose tissue fatty acids levels and physical carcass measurements of pigs fed a fat-free diet. (Abs.) *J. Anim. Sci.* 27:1290-1295.
- ird, D. 1968. Swine testing-present and future. *Hog Prod.* 4(5):6-10.
- ker, D. H., Diller, E. R., <sup>and</sup> Jordan, C. E. 1968. Effect of a combination of diethylstilbestrol and methyltestosterone, sex and dietary protein level on some serum lipids of finishing swine. *J. Anim. Sci.* 27(3):660-663.
- ker, D. H., Becker, D. E., Norton, H. W., Sasse, C. E., Jensen, A. H., and Harmon, B. G. 1968. Feed restriction on gilts during gestation. (Abs.) *J. Anim. Sci.* 27:1149-1150.
- ker, L. N. 1968. Serum protein variation in Duroc and Hampshire pigs. *Vox Sang.* 15:154-158. (ABA 37:667).
- ker, L. N. 1968. New allele in the transferrin system of pigs, Tf<sup>E</sup> Ames, an apparent mutation. *Vox Sang.* 14:446-451. (ABA 37:666).
- ker, R. D., and Coggins, E. G. 1968. Control of ovulation rate and fertilization in prepuberal gilts. *J. Anim. Sci.* 27:1607-1610. (ABA 37:2743).
- ker, R. D., Dziuk, P. J., and Norton, H. W. 1968. Effect of volume of semen, number of sperm and drugs on transport of sperm in artificially inseminated gilts. *J. Anim. Sci.* 27:88-93. (ABA 36:2836).
- ker, R. D., and Roy, G. L. 1968. Estrous synchronization and transport of boar semen to Newfoundland. (Abs.) *Proc. Gen. Soc. & West. Br. Can. Soc. Anim. Prod.* p. 31. (ABA 37:3153).
- ldwin, B. A., and Ingram, D. L. 1968. The influence of hypothalamic temperature and ambient temperature on thermo-regulatory mechanisms in the pig. *J. Physiol.* 198(3):517-529.
- ldwin, B. A., and Ingram, D. L. 1968. The role of behaviour in the regulation of body temperature. *Vet. Annu.* pp. 130-142.
- ldwin, B. A., and Ingram, D. L. 1968. The effects of food intake and acclimatization to temperature on behavioural thermoregulation in pigs and mice. *Physiol. & Behav.* 3:395.



1968

- Baldwin, B. A., and Ingram, D. L. 1968. Factors influencing behavior thermoregulation in the pig. *Physiol. and Behav.* 3:409-415.
- Bamba, K., Kojima, Y., and Iida, I. 1968. Studies on deep-freezing of boar semen. V. The effect of honey-yolk diluent on the livability of frozen boar spermatozoa. *Jap. J. Zootech. Sci.* 39(10):415-421 (ABA 37:1719).
- Bamba, K., Taniguchi, T., Kojima, Y., and Iida, I. 1968. Studies on deep freezing of boar semen. VI. Effects of rapid freezing on survival of boar spermatozoa. *Eng. Sum. (Jap.) Jap. J. Anim. Reprod.* 14:60-64. (ABA 37:733).
- Bane, A. 1968. Control and prevention on inherited disorders causing infertility. *Brit. Vet. J.* 124(1):1-8.
- Banjac, J., and Banjac, D., and Sviben, M. 1963. The duration of the first interfarrowing periods at an early weaning of swine and its possible effect on the index of litter production. *Eng. Sum. (Ser. Stocarstvo* 22(1/2):33-40.
- Banks, B. E. C., Doonan, S., Lawrence, A. J., and Vernon, C. A. 1968. The molecular weight and other properties of aspartate aminotransferase from pig heart muscle. *Europ. J. Biochem.* 5, 528.
- Barber, R. S., Braude, R., Mitchell, K. G., Newport, M. J., Cuthbertson A., and Pomeroy, R. W. 1968. Nitrogen metabolism and body composition of growing pigs. (Abs.) *Anim. Prod.* 10(2):231-248.
- Barbieri, L., Mordenti, A., and Piva, G. 1968. Investigations on the amino-acid content of the meat of entire and castrated pigs. *Eng. Sum. (Ital.) Atti. Soc. Ital. Sci. Vet.* 21:468-473. (ABA 37:1624).
- Barnes, R. H. 1968. Food consumption changes and a pattern of behavioral abnormalities caused by protein deficiency in early life of the rat and pig. *Proc. 1968 Cornell Nutr. Conf. Feed Mfrs.* p. 119.
- Bastijns, L. J. 1968. The influence of diet on the composition of the fatty acids of lard. *Chem. & Indus.* 22:721-722.
- Batte, E. C., Moncol, D. J., Robison, D. W., Schooley, M. A., and Fogg, T. J. 1968. Effects of dichlorvos fed to sows upon pig survival and growth rates. *Proc. 2nd Wld. Conf. Anim. Prod., College Park, Md.*
- Bayer, A., Rohloff, D., and Jakubowski, H. 1968. Pulse frequency and systolic pressure in boars during semen collection on the phantom. *Eng. Sum. (Ger.) Zent.B1. Vet.Med.* 15(2):114-122.



1968

- Wiley, H. S., and Summers, J. D. 1968. Effect of protein level and lysine and methionine supplementation of the performance of growing pigs; response of different sexes and strains of pigs. *Canad. J. Anim. Sci.* 48(2):181-188.
- Wier, F. W., Clawson, A. J., Robison, O. W., and Ulberg, L. C. 1968. Uterine capacity in gilts. (Abs.) *J. Anim. Sci.* 27:299.
- Wier, F. W., Robison, O. W., Clawson, A. J., Fenton, F. R., and Ulberg, L. C. 1968. Time of death following embryo superinduction (Pig). (Abs.) *J. Anim. Sci.* 27:1188.
- Wier, F. W., Clawson, A. J., Robison, O. W., Vincent, C. K., and Ulberg, L. C. 1968. Explanation for embryo death in gilts fed a high energy intake. *J. Anim. Sci.* 27:1021-1026. (ABA 37:685).
- Witze, J., and Smidt, D. 1968. The development of the body of the Gottingen miniature pig. *Eng. Sum. (Ger.) Deut. Tierarztl. Wchn. Schr.* 75(14):353-356.
- Witze, J., Smidt, D., and Szilvassy, F. 1968. Histomorphological and histochemical changes in the placenta of miniature pigs during gestation. *Eng. Sum. (Ger.) Berlin. Munch. Tierarztl. Wchn. Schr.* 81(3):45-49.
- Wolfe, G. R., Kastenschmidt, L. L., Cassens, R. G., Hoekstra, W. G., and Briskey, E. J. 1968. A comparison of the light and dark portions of a striated muscle. *J. Food Sci.* 33(1):84-88.
- Wolfe, H., Eeckhout, W., and Casteels, M. 1968. Relationships between carcass quality and meat quality of pigs. *Eng. Sum. (Fr.) Rev. Agr. (Brussels)* 21(10):1473-1491.
- Wolfe, D. K., Klochkov, D. V., Klochkova, A. A., and Kim, A. A. 1968. Influence of photoperiod on embryonic mortality in minks and sows. (Abs.) VI Cong. Reprod. Insemination Artif, 22-26 July 1968, Paris. *Inst. Natl. Recherche Agron, France.* p. 59.
- Wolfe, D. B. 1968. The influence of feeding level upon the reproductive performance of pregnant sows. *Vet. Rec.* 83:600-601. (ABA 37:1695).
- Wolfe, G. H., O'Hagan, C., and Stewart, D. L. 1968. The effect of length of storage time and numbers of spermatozoa on the fertility of diluted boar semen. VI Cong. Reprod. Insem. Artif. Paris, 1968. *Resumes:* 159. (ABA 37:734).
- Wolfe, B., Shelby, C. E., and Hazel, L. N. 1968. Monte Carlo studies of the roles of selection and inbreeding in genetic advance. *Proc. Sympos. Deterrents to genetic advance from selection.* Sponsored by ENAR Biometric Soc. and Amer. Genetic Assoc., at AIBS, Meet. Sept. 6, 1968, Columbus, Ohio.



1968

- Bereskin, B., Shelby, C. E., and Hazel, L. N. 1968. Carcass traits in purebred and crossbred swine. (Abs.) J. Anim. Sci. 27:1755.
- Bereskin, B., Shelby, C. E., Rowe, K. E., Rempel, W. E., and Dettmers, A. E. 1968. Swine productivity at Minnesota substations. (Abs.) J. Anim. Sci. 27:1755-1756.
- Bereskin, B., Shelby, C. E., Rowe, K. E., Urban, W. E. Jr., Blunn, C. T., Chapman, A. B., Garwood, V. A., Hazel, L. N., Lasley, J. F., Magee, W. T., McCarty, J. W., and Whatley, J. A. Jr. 1968. Inbreeding and swine productivity traits. J. Anim. Sci. 27:339-350. (ABA 36:3837).
- Berruecos, J. M., Blumer, T. N., and Robison, O. W. 1968. Relationships among growth, efficiency and carcass traits in swine. (Abs.) J. Anim. Sci. 27:283.
- Berry, B. W., Hillers, J. K., and Kroening, G. H. 1968. Vertebrae, loin-eye and carcass measurements in swine. (Abs.) J. Anim. Sci. 27:1106.
- Berry, B. W., Hillers, J. K., and Kroening, G. H. 1968. Effect of age on porcine muscle fiber diameter and carcass characteristics. (Abs.) J. Anim. Sci. 27:1106.
- Berry, Robert Kerns. 1968. An investigation of total and <sup>35</sup>S-labeled mucopolysaccharides in intestinal wall and kidney of cattle, sheep and swine. Ph.D. Thesis, U. of Tenn. Libr., Knoxville.
- Berry, R. K., Hansard, S. L., Ismail, R. J., and Wysocki, A. A. 1968. Utilization and placental transfer of S<sup>35</sup> in swine. (Abs.) J. Anim. Sci. 27:1150.
- Best, P. 1968. Breaching breed barriers. Pig Fmg. 16(11):29-30,33. Nov
- Beutling, D. 1968. Observations on the behavior of domestic swine in the slaughterhouse. Eng. Sum. (Ger.) Mon.H. Vet.Med. 23(10):371-374.
- Bevier, R. S. 1968. Retailer's view on cured and processed products. The Pork Industry: Problems and Progress, Iowa State U., Ames. p. 8-11.
- Bichard, M. 1968. Genetic aspects of growth and development in the pig. Growth and Development of Mammals. pp. 309.
- Bichard, M. 1968. Pig improvement and computers. J. U. Newcastle Agr. Soc. 22:13.



1968

- Blackstaffe, R., and Annison, E. F. 1968. The desaturation of stearic acid by mammary gland tissue of the lactating goat and sow. *Biochem. J.* 108:47P.
- Blackhardt, K., and Chevalier, H. J. 1968. Acute degeneration and necrosis of the musculus longissimus dorse in swine. *Eng. Sum. (Ger.) Deut. Tierarztl. Wchn. Schr.* 75(8):198-199.
- Blacknell, E. J. 1968. Association of the stress syndrome to sudden death losses and postmortem characteristics. The Pork Industry: Problems and Progress. Iowa State U., Ames. pp. 206-208.
- Black, J. L. 1968. Gametogenesis and ovarian development in the pig as determined by histologic, cytologic and radio isotopic techniques. *Diss. Abs.* 28(10):3971B-3972B.
- Black, J. L., and Erickson, B. H. 1968. Oogenesis and ovarian development in the prenatal pig. *Anat. Rec.* 161:45-56.
- Blendl, H. M. 1968. The use of ultrasonics in pig performance testing in the field in Bavaria. *Eng. Sum. (Ger.) Zucht.K.* 40(4):264-283. (ABA 37:655).
- Blendl, H. M., and Averdunk, G. 1968. Estimating the carcass composition of pigs with a live weight of 100 kg. *Eng. Sum. (Ger.) Fleischwirtschaft* 48(6):823-826.
- Braz, T. G., and Calder, A. F. C. 1968. A study of factors affecting the partition of dietary energy in the growing pig. Efficiency of production of the fat free body mass in pigs. *PIDA Index Pig Res.* pp. 40-41. Jan.
- Braz, T. G., and Fowler, V. R. 1968. Efficiency of production of the fat free body mass in pigs (1963-67). *PIDA Index Pig Res.* pp. 40 Jan.
- Boccard, R. 1968. Variations in the rate of hydroxyproline in muscles of "Large White" and "Pietrain" pigs. *Eng. Sum. (Fr.) Ann. Zootech.* 17(1):71-75.
- Boddington, M. 1968. When it pays to use A.I. *Pig Fmg.* 16(7):42.
- Bender, J. 1968. Morphological changes of the acrosome of boar spermatozoa during aging and cold shock. *Proc. 6th Internatl. Cong. Reprod. & Artif. Insem.* July 22-26, 1968. *Inst. Natl. Recherche Agron, France*, p. 219. (ABA 37:737).



1968

- Boon-Pin Lim and Lawrie, R. A. 1968. Muscle differentiation and fat deterioration in L. dorsi and psaos. U. Nottingham Sch. Agr. Rpt. 1967/8, 101.
- Booth, W. D., and Schomberg, D. W. 1968. Isolation of 20 $\alpha$  - and 20 $\beta$  hydroxypregn-4-3n-3-one from porcine corpora lutea. J. Endocrinol. 42:607-608.
- Borjanovic, S. 1968. Tests with the artificial insemination of swine. Eng. Sum. (Ser.) Vet. Glasn. 22(5):435-440. (ABA 36:3895).
- Borton, R. J., Webb, N. B., and Bratzler, L. J. 1968. The effect of micro-organisms on the emulsifying capacity and extract release volume of fresh porcine tissues. Food Technol. 22(1):94-96.
- Boursnell, J. C., Briggs, P. A., and Cole, D. M. 1968. Boar vesicular secretion proteins: further comparisons with seminal plasma proteins. J. Reprod. & Fertil. 16:457-461. (ABA 37:738).
- Boursnell, J. C., Briggs, P. A., and Cole, D. M. 1968. Boar seminal plasma agglutinin. Proc. 6th Internatl. Cong. Anim. Reprod. Insem. Artif. 22-26 July, 1968, Paris. Inst. Natl. de la Recherche Agron. France. p. 116.
- Boursnell, J. C., Cole, D. M., and Briggs, P. A. 1968. Boar seminal plasma proteins. Further observations on the haemagglutinating protein and on the coagulation by heat of some seminal plasma prote. J. Reprod. & Fertil. 17:533-541.
- Bouw, J., and Cop, W. A. G. 1968. Research of blood groups of swine. Eng. Sum. (Du.) Tijdschr. Diergeneesk. 92(12):780-785.
- Bowers, J. A., Harrison, D. L., and Kropf, D. H. 1968. Browning and associated properties of porcine muscle. J. Food Sci. 33(2):147-151.
- Bowland, J. P. 1968. Effects of dietary energy, genetic background and market weight on performance of pigs. Proc. 2nd Wld. Conf., Anim. Prod., College Park, Md.
- Bowland, J. P. 1968. Influence of high and low energy diets on performance of three breeding groups of pigs marketed at three different weights. Rpt. 47th Annu. Feed. Day, July 1, 1968. U. Alberta. Dept. Anim. Sci. Edmonton, Alberta, Canada. pp. 2-4.
- Bowland, J. P. 1968. Effect of early treatment on the later performance of market pigs. Rpt. 47th Annu. Feed. Day, July 1, 1968. U. Alberta, Dept. Anim. Sci., Edmonton, Alberta, Canada. pp. 9-10.



1968

- owland, J. P. 1968. Frequency of feeding market hogs. Rpt. 47th Annu. Feeders Day, July 1, 1968. U. Alberta Dept. Anim. Sci. Edmonton, Alberta, Canada. pp. 10-13.
- owles, A. T. C., Trathen, J., and Chapman, E. H. 1968. Progeny and performance testing of pure and crossbred Pietrain pigs. PIDA Index Pig. Res. 1968. pp. 67-68. Jan.
- owman, G. H. 1968. Performance of pigs in highly restricted quarters on slatted floors. (Abs.) Proc. Gen. Soc. & West. Brch. Can. Soc. Anim. Prod. pp. 31-32. (ABA 37:3153).
- owman, G. H., and Norrish, J. G. 1968. The use of ultrasonics in predicting the loin eye area of live pigs. (Abs.) Proc. Gen. Soc. & West. Brch. Can. Soc. Anim. Prod. pp. 21. (ABA 37:3153).
- owman, G. H., and MacLeod, N. M. 1968. The effect of ration form and ingredients on the performance of pure vs crossbred pigs. (Abs.) Proc. Gen. Soc. & West. Brch. Can. Soc. Anim. Prod. p. 22. (ABA 37:3153).
- owman, G. H., Smith, G. C., and Denniss, R. H. 1968. The effect of age and weight on the backfat thickness of Yorkshire boars raised on Ontario farms. (Abs.) Proc. Gen. Soc. & West. Brch. Can. Soc. Anim. Prod. p. 20. (ABA 37:3153).
- oyd, H., and McLaren, R. D. 1968. Vaginal histology and pregnancy diagnosis in sows. VI Cong. Reprod. Insem. Artif. Paris, 1968. Resumes: 87. (ABA 37:686).
- rabant, W., and Schulz, J. 1968. Physiology and pathology of swine lactation. II. Investigations of sow's milk from single glandular sections. Eng. Sum. (Ger.) FortPfl. Besam. Aufzucht. Haust. 4(2/3):89-97.
- rabant, W., Schulz, J., Scholzel, and Lagel, E. 1968. The physiology and pathology of swine lactation. I. Sow's milk. Eng. Sum. (Ger.) FortPfl. Besam. Aufzucht. Haust. 4(1):60-71.
- raude, R. 1968. Index of current research on pigs. XIV. XV. Natl. Inst. Res. Dairying, Shinfield, England. (ABA 37:2674).
- raude, R. 1968. Variations in the composition of pig meat. Proc. C.I.C.R.A. Conf., Dublin, 1967, 21 p.
- raude, R. 1968. Factors limiting pig production. Span 11(1):32-35.



1968

- Braude, R., Mitchell, K. G., Newport, M. J., and Cuthbertson, A. 1968. Performance, nitrogen retention and carcass dissection of pigs fed different all-cereal diets with or without supplementary lysine. Proc. 2nd Wld. Conf. Anim. Prod., College Park, Md.
- Bray, R. W. 1968. Variation of quality and quantity factors within and between breeds. The Pork Industry: Problems and Progress. Iowa State U., Ames. pp. 136-144.
- Bray, R. W., Briskey, E. J., Cassens, R. G., and Kauffman, R. G. 1968. Techniques and their application to meat research. Amer. Soc. Anim. Sci., N. Y.
- Breeuwsma, A. J. 1968. Case of XXY sex chromosome constitution in an intersex pig. J. Reprod. and Fertil. 16:119-120. (ABA 36:3838).
- Breidenstein, B. C. 1968. Packer's view on fresh products. The Pork Industry: Problems and Progress. Iowa State U., Ames. pp. 16-19.
- Breimyler, H. F. 1968. Relationships of supply, demand, and price. The Pork Industry: Problems and Progress, Iowa State U., Ames. pp. 29-34.
- Brinkley, H. J., and Young, E. P. 1968. Determination of the in vivo rate of progesterone secretion by the ovary of the pig during the luteal phase of the estrous cycle. Endocrinol. 82:203-208.
- Briskey, E. J. 1968. Modern production practices and stress conditions as related to pork quality (pale, soft exudative pork) and the porcine sudden death syndrome. South. Ill. U. 11th Annu. Swine Day, p. 23.
- Briskey, E. J. 1968. Muscle. Animal Growth and Nutrition. Pergamon Press.
- Briskey, E. J. 1968. Pale, soft, exudative muscle. Proc. Internatl. Symp. on PSE muscle.
- Briskey, E. J., and Lister, D. 1968. Influence of stress syndrome on chemical and physical characteristics of muscle postmortem. The Pork Industry: Problems and Progress. Iowa State U., Ames. pp. 177-186.
- Brown, B. L., Fosgate, O. T., and Foley, C. W. 1968. Metabolic behavior of bull and boar sperm in 0%, 1% and 3% CO<sub>2</sub> environments. (Abs.) J. Anim. Sci. 27:299-300.



1968

- own, J. E., and Nellor, J. E. 1968. A relationship between ovarian and genital tract eosinophilic granulated cells. *Anat. Rec.* 162(1): 15-21.
- own, R. C., Cole, K. W., Cornell, C. N., and Brinkhous, K. M. 1968. Hemophilia-like disease of swine: cytogenetic studies. *Amer. J. Vet. Res.* 29:1491-1493. (ABA 37:669).
- iere, A. N., Fielden, E. D., and Hutchings, H. 1968. XX/XY mosaicism in lymphocyte cultures from a pig with freemartin characteristics. *New Zeal. Vet. J.* 16(3):31-38. (ABA 36:3839).
- mer, W. H., and Swiger, L. A. 1968. Effects of sex, season and breed on live and carcass traits at the Ohio Swine Evaluation Station. *J. Anim. Sci.* 27:383-388. (ABA 36:3799).
- sch, W. 1968. Contribution to the spermatology of boars. *Eng. Sum. (Ger.) FortPfl. Besam. Aufzucht Haust.* 4(2/3):98-107.
- stad, L. K. 1968. Guinea-pig hogs. *Furrow* 73(6):13-14 Nov.-Dec.
- stad, L. K., and McClellan, R. O. 1968. Miniature swine: development, management, and utilization. *Lab. Anim. Care* 18:280-287. (ABA 37: 605).
- gle, E. D., and Henrickson, R. L. 1968. Change in porcine muscle following death. (Abs.) *J. Anim. Sci.* 27:1138.
- mpbell, D. A. 1968. Purchase of livestock by packers on a carcass grade, carcass weight, or carcass grade and weight basis. Title 9. *Animals and Animal Products. Chapt. II. Packers & Stockyards, Dept. Agr. Part. 201. Regulations under the Packers & Stockyards Act.*
- ntoni, C., Bianchi, M. A., and D'Aubert, S. 1968. Variations of glycogen, sugar of lactic acid, nucleotides, nucleosides and bases during the ripening of salted pork meat. *Eng. Sum. (It.) Arch. Vet. Ital* 19(2):103-112.
- re, A. D., Cooper, C. W., Duncan, T., and Orimo, H. 1968. A study of thyrocalcitonin secretion by direct measurement of in vivo secretion rates in pigs. *Endocrinol.* 83(1):161-169.
- re, A. D., and Gitelman, H. J. 1968. The possible role of adenyl cyclase in thyrocalcitonin release. *J. Endocrinol.* 41:21.
- re, A. D., Leggate, J., and Wasthed, A. B. 1968. Studies of thyrocalcitonin in porcine thyroid venous plasma. (Abs. 71) *Calc. Tiss. Res.* 2, Suppl.



1968

- Carlo, I., and Arcelay, C. L. 1968. Relation between weight at birth and 21, 56 and 154 days of age in pigs. P.R. U. J. Agr. 52(2): 140-147.
- Cassens, R. G., Cooper, C. C., and Briskey, E. J. 1968. Giant fibers in porcine muscle. (Abs.) J. Anim. Sci. 27:1760-1761.
- Castell, A. G., and Bowland, J. P. 1968. Supplemental copper for swine growth, digestibility and carcass measurements. Canad. J. Anim. Sci. 48(3):403-413.
- Cavazos, L. F., Melampy, R. M., Anderson, L. L., and Webel, S. K. 1968. Fine structure of luteal cells of the pig. Anat. Rec. 160:328.
- Cerne, F. 1968. Determination of the optimal date for the artificial insemination of swine and cattle by measuring electrical resistance of vaginal mucous membrane. Eng. Sum. (Ser.) Vet. Glasn. 22(5): 447-453.
- Cervenka, J. 1968. The influence of transport of pigs under higher climatic temperatures on the pH value of meat after slaughter. Rpt. 14th Europ. Meat Res. Conf., Brno, Cz. AMSA. p. 15.
- Champagne, J. R. 1968. Investigations of chemical changes occurring in irradiated animal fats. (Pork) Diss. Abs. 28(11):4611B.
- Chapman, A. B. 1968. Research and its use in the genetic improvement of swine. Anim. Breed. in the Age of A.I. Proc. Symp. U. Wis. ABS. Feb. 29-Mar. 1, 1968, Madison, Wis. p. 120-148.
- Chapman, A. B. 1968. Genetic-environmental interactions in laboratory and farm mammals. Proc. 17th Annu. Natl. Poultry Breed. Roundtable Kansas City, Mo. May 3, 1968. p. 77.
- Cheo, K. L., and Loke, K. H. 1968. Formation of equilenin from equilin by porcine adrenals. Steroids 11:603-608.
- Christenson, R. K., and Day, B. N. 1968. Maintenance of unilateral pregnancy in the pig with induced corpora lutea. (Abs.) J. Anim. Sci. 27:1784-1785.
- Christian, John. 1968. Where do we go from here on pork quality? Proc. 11th Natl. Pork Indus. Conf. Dec. 12-13, 1968. Raleigh, N.C.
- Christian, J. A. 1968. Updating pork quality information. Proc. 11th Natl. Pork Indus. Conf. Dec. 12-13, 1968. Raleigh, N. C.



1968

- cristian, L. L. 1968. Limits for rapidity of genetic improvement for fat, muscle, and quantitative traits. The Pork Industry: Problems and Progress. Iowa State U., Ames. pp. 154-160.
- cristians, C. J. 1968. Minnesota Swine Improvement Program. More heavier meatier pigs through swine testing. Minn. Agr. Ext. Serv. AH-7.
- cristians, C. J., and Arthaud, R. L. 1968. Genetic improvement through swine selection. Minn. Agr. Ext. Serv. B. #353.
- cristians, C. J., and Arthaud, R. L. 1968. Genetic improvement through swine evaluation stations. Minn. Agr. Ext. Serv. B. #349.
- cristians, C. J., Arthaud, R. L., Allen, C. E., and Usborne, W. R. 1968. Revised pork carcass grade standards. U. Minn., Anim. Husb., Fact Sheet #10.
- ausen, H., Nortoft Thomsen, R., and Pedersen, O. K. 1968. 56th report on comparative tests with pigs from state recognized breeding centres in 1966-67. Eng. Sum.(Den.) Beret. Forsogslab. (Copenhagen) 177 pp. (ABA 37:657).
- ckrum, R., Gubser, R. K., Robberson, J. A., Grant, R. A., and Bennett, D. 1968. Our panel reports: What experience (semen collection, estrus synchronization, breeding) have you had with artificial insemination of swine? How do you assess the potential role of veterinarians in this field? Mod. Vet. Pract. 49(5): 65-68, 70-71.
- le, D. J. A., Duckworth, J. E., Holmes, W., and Cuthbertson, A. 1968. Factors affecting voluntary feed intake in pigs. 3. The effect of a period of feed restriction, nutrient density of the diet and sex on intake, performance and carcass characteristics. Anim. Prod. 10:345-357.
- le, J. W., and Lynn, J. R. 1968. Relationships of monetary values with traits commonly used in pork carcass evaluation. Tenn. Farm & Home Sci. Progr. Rpt. 68:27-31.
- le, J. W., and Miller, S. G. 1968. Fasting effects on yields and quality of pork carcasses. (Abs.) J. Anim. Sci. 27:1138-1139.
- Collins, J. C. 1968. Auburn's swine evaluation program. Highlights Agr. Res. 15(4):6.



1968

- Combs, W. 1968. Amount and distribution of lean in Duroc, Hampshire, and Yorkshire sired pigs fed two energy levels, and slaughtered at 150, 200, and 250 lbs. Rpt. 47th Annu. Feed Day July 1, 1968. U. Alberta Dept., Anim. Sci. Edmonton, Alberta, Canada pp. 5-7.
- Combs, W. 1968. Swine breeds and breeding. Proc. Gen. Soc. & West. Brch. Can. Soc. Anim. Prod. pp. 48-49. (ABA 37:3154).
- Conley, Gary Olen. 1968. Genetic variation in gastric lesions of swine. Ph.D. Thesis, Iowa State U. Libr., Ames.
- Cook, B., Niswender, G. D., Sutterlin, N. S., Norton, H. W., and Nalbandov, A. V. 1968. The influence of some steroids, including estrogens, on progesterone synthesis in vitro by porcine corpora lutea. Steroids 11(3):321-326.
- Cooper, C. C., Cassens, R. G., and Briskey, E. J. 1968. Capillary distribution and fiber characteristics in porcine muscle. (Abs.) J. Anim. Sci. 27:1139.
- Cooper, M. McG. and Smith, W. C. 1968. Pietrain Breeding Herd. PIDA Index Pig Res. 1968. pp. 54-55 Jan.
- Cooper, M. McG., Smith, W. C., and Tonks, H. M. 1968. Coordinated breeding program (Newcastle-upon-Tyne). PIDA Index Pig Res. 1968 pp. 52-54. Jan.
- Cop, W. A. G. 1968. Hemolytic disease in newborn pigs as a result of blood group antagonism. Eng. Sum. (Du.) Tijdschr. Diergeneesk. 93(18):1156-1165.
- Cornefert-Jensen, F., Hare, W. C. D., and Abt, D. A. 1968. Identification of the sex chromosomes of the domestic pig. J. Hered. 59(4):251-255. (ABA 37:2731).
- Covey, E. 1968. The effect of environmental temperature, humidity and square meter of floor space on the performance of growing-finishing swine. M.S. Thesis. South. Ill. U. Carbondale, Ill.
- Cox, D. F. 1968. The effect of paternal irradiation on body weight and depth of fat in pigs. Genetics 58(2):271-274. (ABA 36:3840).
- Cox, D. F. 1968. Birth weight in pigs descended from irradiated spermatogonia. Mutat. Res. 4:865-869. (ABA 36:3841).
- Cox, D. F., and Smith, C. 1968. Herd differences and genetic trends in Iowa pigs. J. Anim. Sci. 27:577-583. (ABA 36:3842).



1968

ix, J. E. 1968. Case of a fertile intersex pig. J. Reprod. & Fertil. 16:321-322. (ABA 36:4202).

ighton, D. B. 1968. Induction of oestrus and ovulation during the lactational anoestrus of the sow. Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche Agron. France. p. 266. (ABA 37:687).

ighton, D. B. 1968. Depletion of rat ovarian ascorbic acid by a factor other than luteinizing hormone present in the blood of the pig. J. Reprod. & Fertil. 15(3):457-459.

istea, I., Stanescu, V., Gaboreanu, M., and Bogdan, A. 1968. Ovariectomy of the sow: morphology and physicochemistry of the carcass and histochemistry. Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche Agron. France. p. 318.

Coize, J., and Colleau, J. J. 1968. Theoretical evolution of inbreeding and relationship coefficients in an A.I. Center, estimated in relation to the number of males. Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche Agron. France. p. 251.

Olzoni, V. 1968. Heterochromatic bodies in the neurones of pigs and their relationship with genetic sex. Eng. Sum. (Ital.) Atti. Soc. Ital. Sci. Vet. 1967, 21:217-221. (ABA 37:1670).

nningham, H. M. 1968. Use of triated water to determine the effect of water restriction on the insensible water loss of pigs. J. Anim. Sci. 27:412-417.

nningham, H. M. 1968. Effect of caffeine on nitrogen retention, carcass composition, fat mobilization and the oxidation of C<sup>14</sup>-labeled body fat in pigs. J. Anim. Sci. 27:424-430.

Opka, V. 1968. Unbiased estimation of carcass value in pigs by determination of the longissimus dorsi muscle area by planimetric stencils. Zivoc. Vyr. 6:203-221. (ABA 37:3814).

Opka, V. 1968. Investigations on the suitability of a direct evaluation of cutlet section characters in pigs using planimetric templates and on the determination of fat area by backfat thickness midway over the longissimus dorsi muscle. Eng. Sum. (Ger.) Zucht.K. 40(2):116-126. (ABA 37:614).



1968

- Cupka, V., and Majerciak, P. 1968. A comparison of sow performance and growth capacity of Czechoslovakian Improved White and Landrace purebreds and their crosses. Eng. Sum. (Slov.) Zivoc. Vyr. 6:75-97. (ABA 37:3881).
- Curtis, Stanley Evan. 1968. Studies on the thermoregulatory ontogeny in piglets. Ph.D. Thesis, Purdue U. Libr., Lafayette.
- Curto, G. M., Succi, G., and Pedron, G. 1968. Experiments on the use of growth hormone in pigs for meat. Eng. Sum. (Ital.) Zootech. Vt. 23:291-297. (ABA 37:2689).
- Curto, G. M., Succi, G., and Pedron, F. 1968. The correlations between circumference of the thorax and live weight in fattening pigs. Eng. Sum. (Ital). Atti. Soc. Ital. Sci. Vet. 21:427-430. (ABA 37:1659).
- Cuthbertson, A., and Pease, A. H. R. 1968. The inter-relationships of various measurements, visual assessments and dissection results of pigs of 200 lb live weight. Anim. Prod. 10(3):249-255. (ABA 36:3801).
- Dalrymple, J. R., and Macpherson, J. W. 1968. Low temperature preservation of boar spermatozoa. (Abs.) Proc. Gen. Soc. & West. Brch. Can. Soc. Anim. Prod. p. 30. (ABA 37:3153).
- Dastoli, F. R., Lopiekes, D. V., and Doig, A. R. 1968. Bitter-sensitive protein from porcine taste buds. Nature 218(5144):884-885.
- Davey, R. J., and Morgan, D. P. 1968. Response of swine selected for backfat thickness to two protein levels. (Abs.) J. Anim. Sci. 27:1139.
- Davidson, W. D., Cliplef, R. L., Meade, R. J., and Hanson, L. E. 1968. Post-mortem processing treatment on selected characteristics of ham and fresh pork sausage. Food Technol. 22:772.
- Davidson, W. D., Sample, J. G., Cliplef, R. L., Hanson, L. E., Meade, R. J., and Aunan, W. J. 1968. Effect of antemortem fasting on shrinkage and yields of swine and their carcasses, cuts and products. J. Anim. Sci. 27:355-359.
- Davis, J. W., and Libke, K. G. 1968. Hematologic studies in pigs fed clay pigeon targets. J. Amer. Vet. Med. Assoc. 152(4):382-384.
- Davletova, L. V., and Termeleva, A. G. 1968. Embryonal growth of digestive organs and their condition at birth in piglets and lambs. Eng. Sum. (Russ.) Moskov. Obshch. Ispytatelei Priorody. Tr. Otd. Biol. 29:112-122.



1968

- y, B. N. 1968. Reproduction of swine. Reproduction in Farm Animals. 2nd Ed. pp. 255-263, 279-288.
- y, B. N., and Longenecker, D. E. 1968. Synchronization of estrus and superovulation in swine with ICI 33828 and PMS. Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche Agron, France. p. 267. (ABA 37:689).
- y, B. N., and Polge, C. 1968. Effects of progesterone on fertilization and egg transport in the pig. J. Reprod. Fert. 17:227-230. (ABA 37:690).
- Brignone, C. M. C., Stoppani, A. O. M., and Brignone, J. A. 1968. Corticoids and gestagens action upon myocardial respiratory systems. (pig). Acta Physiol. Latino Amer. 18(3):285. (Abs.)
- nniss, R. 1968. Boar weight and probe program. Hog Prod. 4(5):10-11.
- ttmers, A. 1968. On nutrition of the miniature pigs at the Hormel Institute. Lab. Anim. Care. 18:116-119. (ABA 37:1140).
- ttmers, A., and Rempel, W. E. 1968. Minnesota's miniature pigs. Lab. Anim. Care. 18:104-109. (ABA 37:1140).
- indsa, D. S., and Dziuk, P. J. 1968. Effect on pregnancy in the pig after killing embryos or fetuses in one uterine horn in early gestation. J. Anim. Sci. 27:122-126.
- indsa, D. S., and Dziuk, P. J. 1968. Influence of varying the proportion of uterus occupied by embryos on maintenance of pregnancy in the pig. J. Anim. Sci. 27:668-672.
- mov, Ja. 1968. Embryological data on the reproductive ability of crossbred sows with 75% Landrace and 25% Bulgarian White blood. Eng. Sum. (Bulg.) Zhivotn. Nauki, 5(6):39-46. (ABA 37:692).
- mov, Ja., and Totev, S. 1968. Fattening ability and carcass characteristics of three-breed crosses of pigs (Large White x Landrace x Bulgarian White). Eng. Sum. (Bulg.) Zhivotn. Nauki. 5(7):3-11. (ABA 37:2690).
- nklage, H. 1968. The serum amylase system of pigs and its importance for parentage determination in German Improved Landrace pigs. Eng. Sum. (Ger.) Zucht.K. 40(3): 228-231. (ABA 37:670).
- nklage, H., and Major, F. 1968. E<sup>aegi</sup> (=E<sup>8</sup>), a new allele in the E blood group system of the pig. Vox. Sang. 14:315-317. (ABA 36:3843).



1968

- Dobson, K. J. 1968. Congenital splayleg of piglets. Austral. Vet. J. 44:26-28. (ABA 36:2821).
- Doman, I. 1968. Unusual skin diseases in pigs. Eng. Sum. (Hu) Magyar Allat. Lapja 23(7):337-338.
- Donald, R. A., Salisbury Murphy, S., and Nabarro, J. D. N. 1968. The plasma corticotrophin response to insulin hypoglycaemia, lysine-vasopressin and metyrapone in the pig. J. Endocrinol. 41: 509.
- Done, J. T. 1968. Infective mechanisms in reproductive failure in the sow. Vet. Rec. 83(24):631-632.
- Done, J. T. 1968. Congenital nervous diseases of pigs: a review. Lab. Anim. 2:207-217.
- Done, J. T., and Heard, T. W. 1968. Early pregnancy diagnosis in the sow by vaginal biopsy. Vet. Rec. 82(3):64-68. (ABA 36:2840).
- Done, J. T., and Herbert, C. N. 1968. The growth of the cerebellum in the foetal pig. Res. Vet. Sci. 9(2):143-148.
- Donker-Voet, J., and Bok, J. de. 1968. Mycoplasma (PPLO) in the semen of boars and stallions. Eng. Sum. (Du.) Tijdschr. Diergeneesk. 93(14):912-916.
- Doornenbal, H. 1968. Relationship to body composition of subcutaneous backfat blood volume and red cell mass. Symp. on Body composition in animals and man. U. Mo. 1967.
- Dostal, J. 1968. Study on polymorphic proteins of seminal vesicle fluid and seminal plasma in boars. Immunogenet. Let. 5(3):117-122.
- Draganovic, B., Misic, B., Petrovic, B., and Tadic, M. 1968. Clinical and radiological analysis of diseases of locomotive extremities in swine. III. Study of diseases of legs. Eng. Sum. (Ser.) Vet. Glasn. 22(12):1027-1033.
- Duckworth, J. E. 1968. Hybridization and pig production. Vet. Rec. 83(24):629A.
- Duckworth, J. E., and Holmes, W. 1968. Selection for carcass length in Large White pigs. Anim. Prod. 10:359-372. (ABA 37:615).
- Dufour, J., and Bernard, C. 1968. Effect of light on the development of market pigs and breeding gilts. Can. J. Anim. Sci. 48(3): 425-430. (ABA 37:2719)



1968

- four, J., and Raeside, J. I. 1968. Histochemical demonstration of  $\Delta^5$  - 3 $\beta$  - & 17 $\beta$  - hydroxysteroid dehydrogenases in the testes of the boar. J. Reprod. & Fertil. 16:123-124. (ABA 36:3862).
- Mesnil Du Buisson, F., and Signoret, J. P. 1968. Influence of the interval between weaning and estrus on the farrowing rate in the sow after A.I. Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche Agron. France. (ABA 37:693).
- unne, H. W. 1968. Organisms associated with agalactia, mastitis, and metritis in swine. (Abs.) J. Amer. Vet. Med. Assoc. 152:39-40.
- unne, H. W., and Clark, C. D. 1968. Embryonic and neonatal death in pigs of gilts vaccinated with live virus hog cholera vaccine. (Abs.) J. Amer. Vet. Med. Assoc. 152:37-38.
- unne, H. W., and Clark, C. D. 1968. Embryonic death, fetal mummification, stillbirth, and neonatal death in pigs of gilts vaccinated with attenuated live-virus hog cholera vaccine. Amer. J. Vet. Res. 29(4):787-796.
- utt, R. H., and Chaney, C. H. 1968. Feed intake and embryo survival in gilts. Ky. Anim. Sci. Res. Rpt. 176:33-35. (ABA 37:3883).
- yck, G. W. 1968. Ovulation rates of pigs. (Abs.) Proc. Gen. Soc. & West. Brch. Can. Soc. Anim. Prod. p. 71. (ABA 37:3154).
- yck, G. W. 1968. Physiology of reproduction. Hog Farm Mgt. 5(2):28.
- ziuk, P. J. 1968. Endocrine and embryologic factors as related to early embryonic loss in swine. (Abs.) J. Amer. Vet. Med. Assoc. 152:39.
- ziuk, P. J. 1968. Effect of number of embryos and uterine space on embryo survival in the pig. J. Anim. Sci. 27:673-676.
- ziuk, P. J. 1968. How a sow's pregnancy is affected by distribution of embryos in the uterus. Ill. Res. 10(3):18.
- ziuk, P. J., and Harmon, B. G. 1968. Birth order of pigs. (Abs.) J. Anim. Sci. 27:1190.
- ziuk, P. J., and Polge, C. 1968. Storage and transfer of pig eggs. Proc. 6th Internatl. Cong. Anim. Reprod., Paris.
- arl, F. L. 1968. Housing and handling of miniature swine. Lab. Anim. Care 18:110-115. (ABA 37:1140).



1968

- Echternkamp, S. W., Teague, H. S., Plimpton, R. F., Grifo, A. P., and Cahill, V. R. 1968. Glandular development, hormonal response, and sex odor and flavor intensity in untreated and diethylstilbestrol implanted boars. Ohio Agr. Res. Develop. Center. Res. Sum. 29: 17-20.
- Ectors, F., and Derivaux, J. 1968. Influence of medroxyprogesterone on the pituitary gland and the genital tract of the sow. Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche Agron. France. p. 322. (ABA 37:694).
- Edwards, C. J. 1968. Seedstock selection. Hog Farm Mgt. 5(5):56.
- Edwards, R., de B. Hovell, R. D., and Boaz, T. G. 1968. Some relationships between K40 activity and composition of baconer shoulder joints. (Abs.) Anim. Prod. 10(2):231-248.
- Edwards, R., Omtvedt, I. T., Turman, E. J., Rule, D. R., Stephens, D. F., and Mahoney, G. W. A. 1968. Reproductive performance of gilts following exposure to heat stress prior to breeding and in early gestation. Okla. Agr. Expt. Sta. MP-80:97.
- Edwards, R. L., Omtvedt, I. T., Turman, E. J., Stephens, D. F., and Mahoney, G. W. A. 1968. Heat stress prior to breeding and in early gestation in gilts. (Abs.) J. Anim. Sci. 27:300.
- Edwards, R. L., Omtvedt, I. T., Turman, E. J., Stephens, D. F., and Mahoney, G. W. A. 1968. Reproductive performance of gilts following heat stress prior to breeding and in early gestation. J. Anim. Sci. 27:1634-1637. (ABA 37:2747).
- Ehlsley, F. W. H. 1968. The incidence of taint in entire male pigs. PIDA Index Pig Res. pp. 18-19, Jan.
- Einarsson, S. 1968. Fertility and serving ability of Swedish Landrace and Swedish Yorkshire boars. Nord. Vet. Med. 20:616-621.
- Einarsson, S. 1968. Factors affecting fertility in artificial insemination of swine. Nord. Vet. Med. 20:622-629. (ABA 37:1724).
- Elliot, J. I., and Bowland, J. P. 1968. Effects of dietary copper sulfate on the fatty acid composition of porcine depot fats. J. Anim. Sci. 27(4):956-960.
- Elliot, R. J., and Patton, J. 1968. The effects of road transportation and lairage treatment of pig muscle. Rpt. 14th Europ. Meat Res. Conf., Brno, Cz. AMSA, Chicago. p. 15.



1968

- liott, R. J., and Walker, N. 1968. Effect of dietary zinc on the growth rate and on the zinc and pigment contents of blood and muscle in the pig. Irish J. Agr. Res. 7(1):131-133.
- lis, R., Currie, G. T., Thornton, F. E., Bollinger, N. C., and Gaddis, A. M. 1968. Carbonyls in oxidizing fat. 11. The effect of the prooxidant activity of sodium chloride on pork tissue. J. Food Sci. 33(6):555-561.
- sley, F. W. H. 1968. Report on subjective tests and on the sensitivity of different people in the detection of natural and synthetically produced boar taint. Proc. E.A.A.P. Pig Comm., Dublin.
- sley, F. W. H. 1968. Prenatal and postnatal effects on subsequent performance and carcass quality. The Pork Industry: Problems and Progress, Iowa State U., Ames. pp. 51-66.
- sley, F. W. H. 1968. The influence of feeding level upon the reproductive performance of pregnant sows. Vet. Rec. 83(4):93-97.
- sley, F. W. H., MacPherson, R. M., and Lodge, F. A. 1968. The effects of level of feeding of sows during pregnancy. III. Body composition. Anim. Prod. 10(2):149-156.
- sley, F. W. H., MacPherson, R. M., Ball, S. E., and Pirie, I. M. 1968. Studies on the growth and development of the foetal pig. (Abs.) Anim. Prod. 10(2):231-248.
- sley, F. W. H., McPherson, R. M., and Lodge, G. A. 1968. The effects of level of feeding of sows during pregnancy. III. Body composition. Anim. Prod. 10(2):149-156.
- sley, F. W. H., MacPherson, R. M., and McDonald, I. 1968. The influence of intake of dietary energy in pregnancy and lactation upon sow productivity. J. Agr. Sci. 71:215-221.
- gland, D. C. 1968. Genetic basis of and procedures for development of miniature swine. Lab. Anim. Care 18:99-103. (ABA 37:1140).
- gland, D. C. 1968. Evaluating sow productivity. Hog Farm Mgt. 5(9):15, 56-57.
- gland, D. C., and Gomez, F. 1968. Association of average daily gain and feed efficiency of individually fed littermate pigs. Proc. 2nd Wld. Conf. Anim. Prod. College Park, Md.



1968

- Engle, C. C., Dunn, J. S., Hood, R. D., Williams, D. J. III., Foley, C. W., and Trout, H. F. 1968. Amino acids in sow and rabbit oviduct fluids. (Abs.) J. Anim. Sci. 27:1786.
- Erickson, B. H. 1968. Radioresponse of the pre-puberal porcine ovary. Internatl. J. Radiat. Biol. 13(1):57-67.
- Eriksen, E. 1968. Oestrogenic factors in mouldy grain. Vulvo-vaginitis in swine. Eng. Sum. (Dan.) Nord. Vet.Med. 20:396-401.
- Espey, L. L., Rondell, P. 1968. Collagenolytic activity in the rabbit and sow Graafian follicle during ovulation. Amer. J. Physiol. 214: 326-329.
- Ewbank, R. 1968. Tail-biting in pigs: A behavioural disease? Vet. Rec. 83(24):635.
- Fabbri, R., and Semprini, P. 1968. Preliminary observations on partial castration of pigs by Baiburtcjan's method. Eng. Sum. (Ital.) Atti. Soc. Ital. Sci. Vet. 1968, 21:529-532. (ABA 37:1628).
- Farries, E., and Angelowa, L. 1968. Comparative investigations on the nutrient digestibility and nitrogen retention of German Improved Landrace swine, wild swine, and F<sub>1</sub> crosses. Eng. Sum. (Ger.) Z. Tierphysiol. Tierernahr. U. Futtermittelk 23(5):263-266.
- Faull, W. B., and Baker, J. R. 1968. The influence of feeding level upon the reproductive performance of pregnant sows. Vet. Rec. 83(20):524-526.
- Fausch, H. D., Richmond, R., and Anderson, T. A. 1968. Influence of fasting on body composition and tissue cholesterol levels in swine. J. Anim. Sci. 27:1273-1276.
- Fenton, F. R., Bazer, F. W., Robison, O. W., and Ulberg, L. C. 1968. Uterine capacity of unilaterally hysterectomized gilts. (Abs.) J. Anim. Sci. 27:1190.
- Ferencz, G., and Csire, L. 1968. Calculation of the number of sows to be served by one boar for progeny testing. Eng. Sum. (Hu.) Allattenyesztes 17(1):45-54. (ABA 36:2815).
- Feric, Z., and Sviben, M. 1968. Phenotypical correlation between the number of teats and fertility of farrowed for the first time and the survival of their litter. Eng. Sum. (Ser.) Stocarstvo 22(3/4): 129-135.



1968

- Avre, J., Leglise, P. C., and Rombauts, P. 1968. Role of the pituitary and ovaries in oestrogen biosynthesis in the pregnant sow. Eng. Sum. (Fr.) Ann. Biol. Anim. Biochim. Biophys. 8(2): 225-233.
- Erst, N. L. 1968. Collection and preservation of spermatozoa. Methods in Mammalian Embryology. Academic Press, N. Y.
- Erst, N. L. 1968. Collection, evaluation and insemination of boar semen. Proc. 2nd Tech. Conf. A.I. Reprod. Chicago, Natl. Assoc. Anim. Breed., Columbia, Mo.
- Erst, N. L., Short, R. E., Peters, J. B., and Stratman, F. W. 1968. Transport of boar spermatozoa in estrual and luteal sows. J. Anim. Sci. 27:1032-1036. (ABA 37:695).
- Erst, N. L., Short, R. E., Peters, J. B., and Stratman, F. W. 1968. Transport and loss of boar spermatozoa in the reproductive tract of the sow. J. Anim. Sci. 27:1037-1040.
- Etzhugh, H. A., and Taylor, C. S. St. 1968. Indirect selection for feed efficiency. (Abs.) J. Anim. Sci. 27:1126.
- Lock, D. 1968. Colour brightness in the m. longissimus dorsi as a characteristic for use in the selection of pigs. (Ger.) Fleischwirtschaft 48(10):1362-1365.
- Lock, D. K. 1968. Pig testing and breeding improvement in Western Germany. Proc. Internatl. Summer Sch. Biomathematics and Data Processing in Animal Experiments, Elsinore, Denmark. June 30-July 13, 1968.
- Lock, D., and Zagozen, F. 1968. On the accuracy of planimetric measurements of cutlet photographs. Eng. Sum. (Ger.) Z. Tierzucht. ZuchtBiol. 85(2):123-134. (ABA 37:1629).
- Olley, S. J., and Linford, E. 1968. A study of the metabolism of boar semen with special reference to improvement of semen diluents and semen storage. PIDA Index Pig Res. pp. 11-12. Jan.
- Orenbacher, S., Zdelar, F., Marzan, B., Sankovic, F., and Mitin, V. 1968. Experimental studies in metabolic and adaptational disturbances of endocrine character in swine, with special regard to the failure of adrenal, thyroid and pancreatic apparatus. I. General observations, materials and methods of study. Eng. Sum. (Ser.) Vet. Arh. 38(3/4):86-107.



1968

- Forrest, J. C., Will, J. A., Schmidt, G. R., Judge, M. D., and  
Briskey, E. J. 1968. Homeostasis in animals (*sus domesticus*)  
during exposure to a warm environment. *J. Appl. Physiol.* 24(1):  
33-39.
- Forstner, M. J. 1968. Serum analysis in pigs and cattle of varying  
ages. *Eng. Sum. (Ger.) Zent.Bl. Vet.Med.* 15(1):76-80.
- Foster, J. R. 1968. Effect of 2, 2-Dichlorovinyl dimethyl phosphate  
on reproductive performance of swine. (Abs.) *J. Anim. Sci.* 27:  
1774.
- Fowler, V. R. 1968. Body development and some problems of its evalu-  
ation. In Growth and Development of Mammals. Butterworth, London,  
pp. 195.
- Fowler, V. R. 1968. Pattern of feed intake on some criteria of  
efficiency for bacon pigs. (Abs.) *Anim. Prod.* 10(2):231-248.
- Frape, D. L., Wolf, K. L., Wilkinson, J., and Chubb, L. G. 1968. An  
economic assessment of growth and food intake of Landrace and  
Hampshire-cross pigs. (Abs.) *Anim. Prod.* 10(2):231-248.
- Fraser, A. F. 1968. A method of pregnancy diagnosis in sows by  
ultrasonic detection of the gravid uterine pulse per rectum.  
*Vet. Rec.* 83:360-361. (ABA 37:697).
- Fraser, A. F., and Robertson, J. G. 1968. Pregnancy diagnosis and  
detection of foetal life in sheep and pigs by ultrasonic method.  
*Brit. Vet. J.* 124(6):239-244.
- Fredeen, H. T. 1968. Breeding development methods for maximum  
production. *Hog Prod.* 4(4):10, 14-15.
- Fredeen, H. T., and Bowman, G. H. 1968. Carcass weight and backfat  
in relation to commercial grades of pigs in Canada. *Canad. J.*  
*Anim. Sci.* 48:109-116. (ABA 37:616).
- Fredeen, H. T., and Bowman, G. H. 1968. Backfat thickness and carcass  
weight as predictors of the yield of hams and loins of pig carcasses.  
*Canad. J. Anim. Sci.* 48:117-129. (ABA 37:617).
- Fredeen, H. T., and Newman, J. A. 1968. Cryptorchid condition and  
selection for its incidence in Lacombe and Canadian Yorkshire pigs.  
*Canad. J. Anim. Sci.* 48:275-284. (ABA 37:2733).
- Frobish, L. T. 1968. Effect of energy intake on reproductive perfor-  
mance of gilts. (Abs.) *J. Anim. Sci.* 27:1775.
- Fulka, J., and Kopečný, V. 1968. Pig oocyte development at birth.  
VI Cong. Reprod. Insem. Artif. Paris, 1968. Resumes: 30. (ABA  
37:698)



1968

- Miller, M. N., and Baxtresser, B. B. 1968. Marketing of livestock, meat, and meat products: 1962-June 1967, A list of selected references. U.S. Natl. Agr. Libr. List 96.
- Miller, W. B., Clawson, A. J., Robison, O. W., Vincent, C. K., and Ulberg, L. C. 1968. Explanation for embryo death in gilts fed a high energy intake. J. Anim. Sci. 27:1021-1026.
- Murugouri, K., Ishi, T., and Tohara, S. 1968. Variation in erythrocytes and blood specific gravity in the growing piglets. Eng. Sum. (Jap.) Natl. Inst. Anim. Indus. B. 16:51-60.
- Šabris, J., and Staník, J. 1968. The heritability of teat number in Improved Whites, Landraces, their crosses and Cornwalls. Eng. Sum. (Cz.) Zivoc. Vyr. 13:29-38. (ABA 36:2823).
- Šabris, J., and Staník, J. 1968. Application of the repeatability in the evaluation of fertility in pigs. Eng. Sum. (Cz.) Zivoc. Vyr. 13:561-566.
- Šabris, J., and Staník, J. 1968. Inheritance of the number of teats in the Czechoslovak Improved White, Landrace and Cornwall swine breeds and in the crosses of the Czechoslovak Improved White with the Landrace swine breed. Eng. Sum. (Cz.) Zivoc. Vyr. 41(1):29-38.
- Šabris, J., and Staník, J. 1968. Application of the repeatability in the evaluation of fertility in pigs. Eng. Sum. (Cz.) Zivoc. Vyr. 13:561-566. (ABA 37:1698).
- Šabris, J., Staník, J., and Mraz, G. 1968. Correlation between daily weight gains and feed consumption of swine at stations for the control of fattening capacity during 1963-1965. Eng. Sum. (Cz.) Pol'nohospodarstvo 14(5):389-396.
- Šamčík, P. 1968. Fetal death in utero in sows. Eng. Sum. (Ser.) Vet. Glasn. 22:475-82.
- Šamčík, P. 1968. A contribution to the study of prenatal losses in sows. Eng. Sum. (Ser.) Vet. Glasn. 22(5):475-482.
- Šamčík, P., and Hajovsky, T. 1968. Attempt at influencing pre-natal losses in sows by means of administration of ovarian hormones. (oestradiol, progesterone). Eng. Sum. (Cz.) Veterinaria SPOFA 10(1):53-64.
- Šamčík, P., and Sevcík, A. 1968. Development and growth of gonads in Czechoslovak White Improved, Landrace and Cornwall boars. Eng. Sum. (Cz.) Pol'nohospodarstvo 14:697-705. (ABA 37:2750).



1968

- Garbers, D. L., and First, N. L. 1968. Effects of ICI 33828 and oxytocin on milk ejection and milk production in the lactating sow. J. Reprod. & Fertil. 17:551-553.
- Gardner, P. J., Shervey, P. D., and Hard, W. 1968. Secretory activity in the aspermatogenic testis. (pig) (Abs.) Anat. Rec. 160:351.
- Gavalier, M. 1968. A study of genetic linkage of the blood group loci to loci determining serum biochemical polymorphic markers in pigs. Immunogenet. Let. 5(3):107-111.
- Gavalier, M. 1968. A contribution towards the study of correlations between erythrocytic antigens and some fattening and carcass value characters in pigs. Immunogenet. Let. 5(3):112-115.
- Georgiev, G. 1968. The free ethanolamine content of boar spermatozoa. Eng. Sum. (Bulg.) Vet. Med. Nauki 5(4):69-71. (ABA 37:740).
- Gerrits, R. J. 1968. Factors affecting swine research programs of the future. 31st Annu. Rpt. & Rec. Proc. Conf. of Collab., Reg. Swine Lab. July 8-9, Raleigh, N. C. pp. 68-78.
- Gerrits, R. J. 1968. Planning swine research programs for the future. Proc. 11th Natl. Pork Indus. Conf. Dec. 12-13, 1968. Raleigh, N. C.
- Gerrits, R. J. 1968. Influence of the endocrine system on growth and development. Proc. 21st Annu. Recip. Meat Conf. 21:331-341.
- Gerrits, R. J., Hawk, H. W., and Stormshak, F. J. 1968. Fertility and corpus luteum characteristics in pigs with plastic devices in the uterine lumen. J. Reprod. & Fertil. 17:501-508.
- Gerrits, R. J., Hetzer, H. O., and Kouba, R. T. 1968. Synchronization of estrus and reproductive performance of gilts and sows fed ICI 33,823. Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche Agron. p. 274. (ABA 37:700)
- Gillman, T., and Binns, R. M. 1968. The ontogeny of immune responses in the pig. PIDA Index Pig Res. 1968 pp. 3-4. Jan.
- Ginsburg, M., and Jayasena, K. 1968. Distribution of proteins that bind neurohypophysial hormones (pig). J. Physiol. (London) 197: 65-76.
- Ginsburg, M., and Jayasena, K. 1968. Occurrence of antigen reacting with antibody to porcine neurophysin. J. Physiol. (London) 197: 53-64.



1968

- Glasnak, V. 1968. Inter-and intra-specific differences in milk proteins of cattle and swine. *Compar. Biochem. Physiol.* 25:355-357. (ABA 37:2734).
- Glasnak, V. 1968. Polymorphism of beta<sub>1</sub> - caseins in sow's milk. *Folia Biol. (Praha)* 14(1):70-73. (ABA 37:1674).
- Gledhill, B. L., Gledhill, M. P., and Henricson, B. 1968. An attempt to measure a chromatin distributive imbalance in spermatozoa. *Hereditas* 60:407-409. (ABA 37:1675).
- Goll, D. E. 1968. The resolution of rigor mortis. *Proc. 21st Annu. Recip. Meat. Conf. July 1-3, 1968, Athens, Ga.* pp. 16-46.
- Goodman, P., Latta, J. S., Wilson, R. B., and Kadis, B. 1968. Fine structure of sow lutein cells. *Anat. Rec.* 161:77-90.
- Goodwin, R. F. W. 1968. The conflict between health control and genetical improvement schemes in the pig industry. *Vet. Rec.* 83(24):631.
- Goutefongea, R. 1968. Relations between potassium, sodium, calcium and magnesium contents of pork muscle and certain physico-chemical characteristics. *Eng. Sum. (Fr.) Ann. Zootech.* 17(2):207-211.
- Graham, E. F., Thompson, L., and Neville, W. 1968. Physical, physico-chemical and chemical characteristics of boar semen. *Proc. 2nd. Tech. Conf. on A.I. and Reprod. Natl. Assn. Anim. Breed., Columbia, Mo.* 62:55-63.
- Granwell, P. D., Noakes, D. E., and Hill, K. J. 1968. Observations on the stomach content of the sucking-pig. (Abs.) *Proc. Nutr. Soc.* 27(1):26A.
- Gray, R. C., Tribble, L. F., Day, B. N., and Lasley, J. F. 1968. Results of five generations of selection for low backfat thickness in swine. *J. Anim. Sci.* 27:331-335. (ABA 36:3845).
- Greene, R. L. 1968. A "sauare" pig. *Hog Farm Mgt.* 5(3):25-26, 28.
- Greenwood, B. 1968. The motility of sheep, human and pig blood eosinophil leucocytes in vitro. *J. Physiol. (London)* 196:108.
- Gricenko, N. M., and Polivoda, D. I. 1968. Variations in protein composition of sow's milk during lactation. *Eng. Sum. (Russ.) Sel'skohoz. Biol.* 3:403-407.



1968

- Griffin, S. A. 1968. Breeds, breeding and pork quality. Proc. 11th Natl. Pork Indus. Conf. Dec. 12-13, 1968. Raleigh, N. C.
- Grove, D., Bollwahn, W., and Mahler, R. 1968. Experiments on the collection and deep freeze preservation of semen from the epididymis of boars. Eng. Sum. (Ger.) Deut. Tierarztl. Wchn.Schr. 75(2):35-38 (ABA 36:3896).
- Groves, T. W. 1968. Field experiments on the precise control of insemination dates in pigs. Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche Agron, France. p. 277. (ABA 37:701).
- Groves, T. W., and Smith, W. C. 1968. Oestrus synchronization of stall-housed sows with Methallibure. (Abs.) Anim. Prod. 10(2): 231-248.
- Grunsell, C. S. G., Penny, R. H. C., and Randall, G. C. 1968. An investigation into the losses of pigs during the pre-weaning period. PIDA Index Pig Res. p. 30. Jan.
- Hacker, Dennis E. 1968. An evaluation of breeds of swine on the basis of their crossbred performance. M.S. Thesis, U. Minn. Libr., St. Paul.
- Hacker, R. R., Hill, D. L., Curtis, S. E., Walker, N. R., and Erb, R. E. 1968. Relationship between sows' udder weights and piglet weights. (Abs.) J. Anim. Sci. 27:1786.
- Haensly, W. E., and Getty, R. 1968. Age changes in the weight of the adrenal glands of swine from birth to eight years. J. Geront. 23(1):53-57.
- Hagen, K. L., Rasmusen, B. A., and Mittal, K. K. 1968. Further investigations on linkage between the loci for heme-binding globulins and K blood groups in pigs. Vox Sang. 15:147-151. (ABA 37:671).
- Hale, O. M., Johnson, J. C. Jr., and Warren, E. P. 1968. Influence of season, sex and diet on performance and carcass traits of swine. (Abs.) J. Anim. Sci. 27:284.
- Hale, O. M., Johnson, J. C., and Warren, E. P. 1968. Influence of season, sex, and dietary energy concentration on performance and carcass characteristics of swine. J. Anim. Sci. 27(6):1577-1582.
- Hancock, J. L., and Buttle, H. L. 1968. Tubal transport and fertilization of ova in gonadotrophin-treated pigs. J. Reprod. & Fertil. 16(2): 261-270. (ABA 36:3867).



1968

- andlin, D. L. 1968. Swine research at Clemson University. S. C. Agr. Expt. Sta. Anim. Sci. Leaflet 3, rev. 8 p. folder.
- ardy, D. A., and Ling, N. R. 1968. Nucleic acid synthesis in stimulated pig lymphocytes in relation to time and dose of stimulant. Biochem. J. 108, 23 p.
- arris, J. I., and Perham, R. N. 1968. Glyceraldehyde 3-phosphate dehydrogenase from pig muscle. Nature 219(5158):1025-1028.
- arrison, R. A. P. 1968. Hexokinases in semen from the bull, boar, and ram. Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche Agron. France. p. 226.
- arvey, J. R. 1968. Nonmeat Food Products. Development and marketing. The Pork Industry: Problems and Progress. Iowa State U., Ames. pp. 43-47.
- arvey, M. J. A. 1968. A male pig with an XXY/XXXY sex chromosome complement. J. Reprod. & Fertil. 17:319-324. (ABA 37:1677).
- astings, S. G., Booth, N. H., and Hopwood, M. L. 1968. Influence of sex hormones on mucopolysaccharide synthesis of swine arteries. J. Atheroscler. Res. 8:29-35.
- ays, V. W. 1968. Nutritional and management effects on performance and carcass measurements. The Pork Industry: Problems and Progress. Iowa State U., Ames. pp. 67-77.
- edrick, H. B., Leavitt, R. K., and Alexander, M. A. 1968. Variation in porcine muscle quality of Duroc and Hampshire barrows. J. Anim. Sci. 27:48-52. (ABA 36:2785)
- eidrich, H. J., Rohloff, D., and Jakubowski, H. 1968. Histometrical studies on testes of boars of various ages and weights. Eng. Sum. (Ger.) Zuchthy. Fort. Pfl. Stor. Besam. Haust. 3:79-83. (ABA 36:3868).
- ende, C. Van Den, Muylle, E., and Oyaert, W. 1968. Enzyme activities of liver, heart-and skeletal muscles of the pig. Zent.Bl. Vet.Med. Reihe A, 15(2):135-142.
- enderson, D. W. 1968. Effect of temperature on post-mortem structural changes in rabbit, bovine and porcine skeletal muscle. Diss. Abs. 29(4):1223B-1224B.



1968

- Henderson, D. W., Goll, D. E., and Parrish, F. C. Jr. 1968. Ultrastructural changes in post-mortem muscle. (Abs.) J. Anim. Sci. 27:1762.
- Hennig, A., and Wendler, G. 1968. The effect of early weaning of piglets on the fertility, growth and reproductive rate and the breeding performance of sows. Eng. Sum. (Ger.) Jahrb. Arbeitsgemeinschaft. Futterungs Beratung 6:184-192.
- Hendricks, D. G. 1968. Some factors affecting mineral utilization by the baby pig. Diss. Abs. 28(12, pt. 1):4821B.
- Henrickson, R. L. 1968. The influence of pre-chill processing on pork products. Diss. Abs. 28:B4817.
- Henry, V. G. 1968. Length of estrous cycle and gestation in European wild hogs. Wild. Mgmt. 32:406-408.
- Herak, M., Herak, M., and Loncaric, J. 1968. Activity of some phosphatases and transaminases in the blood of sows and changes of their activity during pregnancy. Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche Agron. France p. 330.
- Herak, M., and Miljak, Z. 1968. Frequency of appearance of heat in sow and gilts at different times of the day and year. Proc. 6th Internatl. Cong. Reprod. Artif. Insem. Paris, 1968. Resumes: 64. (ABA 37:702).
- Hesby, J. H., Conrad, J. H., and Plumlee, M. P. 1968. Effect of protein levels and opaque-2 corn on swine reproduction. (Abs.) J. Anim. Sci. 27:1152-1153.
- Hesselholt, M., Hansen, O., and Panic, B. 1968. Time of appearance and origin of some polymorphic proteins in serum of piglets. Acta. Vet. Scand. 9(3):280-283. (ABA 37:1678).
- Hetzer, H. O., and Miller, R. H. 1968. Influence of selection for high and low fatness on reproductive performance in swine. (Abs.) J. Anim. Sci. 27:1756.
- Hicks, A. M., and Webster, A. J. F. 1968. Feed utilization by growing pigs exposed to cold environments. Rpt. 47th Annu. Feed Day, July 1, 1968. U. Alberta, Dept. Anim. Sci., Edmonton, Alberta, Canada. pp. 16-17.



1968

- ignett, P. G., and Harvey, M. J. A. 1968. A study in cytogenetics in the pig. PIDA Index Pig Res. p. 39. Jan.
- imeno, K., Nagano, R., Mori, T., Mogi, K., Abe, T., and Hosoda, T. 1968. Studies of the hemolytic disease of newborn pigs. V. Changes in agglutination titer of colostrum and serum collected from sow producing affected litters. Eng. Sum. (Jap. ) Jap. J. Zootech. Sci. 39(6):275-280.
- offman, R. 1968. Genetic parameters of carcass measurements in swine. Thesis. South Ill. U. Dept. of Anim. Indus. Carbondale, Ill.
- offman, R. E., Miller, H. W., and Goodman, B. L. 1968. Heritabilities and correlations of carcass and production characteristics in meat-type swine. (Abs.) J. Anim. Sci. 27:284.
- olden, P. J., Lucas, E. W., Speer, V. C., and Hays, V. W. 1968. Effect of protein level during pregnancy and lactation on reproductive performance in swine. J. Anim. Sci. 27:1587-1590. (ABA 37:2753).
- ollandbeck, R. 1968. Factors affecting litter size. Wallaces Fmr. 93(22)16 Nov. 23.
- ollis, G. R., Bowers, D. H., Carpenter, J. W., and Palmer, A. Z. 1968. The effect of floor design on performance and carcass characteristics of growing-finishing pigs. Suwannee Valley Expt. Sta. Mimeo. Rep. SVS 69-1.
- olmes, C. W. 1968. Heat losses from young pigs at three environmental temperatures measured in a direct calorimeter. Anim. Prod. 10(2): 135-147.
- olmes, W., and Duckworth, J. E. 1968. Pietrain herd -Two and three breed crossing experiments. PIDA Index Pig. Res. p. 51. Jan.
- olota, Ya. A., Borodai, H. P., and Kas'yan, H. H. 1968. Dynamics of blood serum proteins in livestock as related to age. Eng. Sum. (Ukr) Ukr. Biokhim. Zhurnal 40(2):209-212.
- olt, J. P., Rhode, E. A., and Kines, H. 1968. Ventricular volumes and body weight in mammals. Amer. J. Physiol. 215, 704.
- oltz, W., Smidt, D., Thume, O., and Weselch, E. 1968. Changes in vaginal pH, rectal and vaginal temperature and vaginal epithelium in relation to the sexual cycle in the Gottingen miniature pig. Eng. Sum. (Ger.) Zent.B1. Vet.Med. Reihe A, 15(4):329-352.



1968

- Holub, A. 1968. Changes in weight gains of piglets and in milk yields of sows in past decades. Eng. Sum. (Cz.) Vet. Med.(Praha) 13:511-519. (ABA 37:1634).
- Hood, R. D., Foley, C. W., and Martin, T. G. 1968. Cation concentration changes in boar spermatozoa. (Abs.) J. Anim. Sci.27:1192.
- Horst, C. J. G. 1968. Preliminary investigation into the occurrence of steroids in ovaries of pigs at three stages of pregnancy. Eng. Sum. (Du.) Tijdschr. Diergeneesk. 93(22):1515-1529.
- Hosoda, T., Mogi, K., Himeno, K., Ishida, K., and Sato, A. 1968. Haemolytic disease of newborn pigs. 3. Histological findings of piglets dead from haemolytic disease. Eng. Sum. (Jap.) Jap. J. Zootech. Sci. 39(2):73-77.
- Houston, T. W., and Whitworth, V. A. 1968. The effect of preslaughter variables on the post mortem behaviour of pork. PIDA Index Pig Res. p. 44. Jan.
- Houston, T. W., Reed, R., Kennelly, J. S., Todd, P. M., and Whitworth, V. A. 1968. Influence of breed on the intra-muscular composition of pig meat. (Abs.) Proc. C.I.C.R.A. Conf. on 'The composition of Animal Products', Dublin, 1967.
- Hovorka, F. 1968. A contribution on the increased production of lean pork. Eng. Sum. (Ger.) Jahr. Arbeitsgemeinschaft Futterungs Beratung 6:222-231.
- Hovorka, F., and Pavlik, J. 1968. Use of rotational commercial crossing of Improved White, Landrace and Cornwall pigs. Eng. Sum. (Cz.) Zivoc. Vyr. 13:593-602. (ABA 37:1635).
- Howe, J. M., Thomas, N. W., Addis, P. B., and Judge, M. D. 1968. Temperature acclimation and its effects on porcine muscle properties in two humidity environments. J. Food Sci. 33(3):235-238.
- Hubbard, A. W., and Pocklington, W. D. 1968. Distribution of fatty acids in lipids as an aid to the identification of animal tissues. I. Bovine, porcine, ovine and some avian species. J. Sci. Food & Agr. 19(10):571-577.
- Huffman, D. L., Powell, W. E., Squiers, C. D., Collins, J. C., Warren, W. M., Tucker, H. F., and Brown, V. L. 1968. Relationship among factors affecting pork carcass composition. (Abs.) J. Anim. Sci. 27:287.



1968

- Huffman, D. L., Powell, W. E., Squiers, D. C., Collins, J. C., Warren, W. M., Tucker, H. F., and Brown, V. L. 1968. Influence of age and certain carcass traits on pork tenderness. (Abs.) J. Anim. Sci. 27:287.
- Hunter, R. H. F., and Dziuk, P. J. 1968. Sperm penetration of pig eggs in relation to the timing of ovulation and insemination. J. Reprod. & Fertil 15(2):199-208. (ABA 36:2843).
- Hunziker, O., and Nicolet, J. 1968. Esophageal-gastric lesions in swine. Eng. Sum. (Ger.) Schweiz. Arch. Tierheilk. 110(6):302-308.
- Hutt, F. B. 1968. Breeding disease resistant animals. Agr. Sci. Rev. 6(3):11-18.
- Hyldgaard-Jensen, J. 1968. Lactic dehydrogenase in pigs. A review. Eng. Sum. (Dan.) Aarsberet. Inst. Sterilitetsforsk. K. Vet.-og Landbohojsk (Copenhagen) 1968:243-284. (ABA 37:1679).
- Ilancic, D. 1968. Sex ratio in piglets and pups. Eng. Sum. (Ser.) Veterinaria (Sarajevo) 17(2):239-242. (ABA 36:3871)
- Ilancic, D., Nikolic, P., and Pavlovic, D. 1968. Analysis of litter size and losses in baby pigs in a breeding population of white meat swine. Eng. Sum. (Ser.) Vet. Glasn. 22(7):601-607. (ABA 36:3804).
- Isler, G. A., and Swiger, L. A. 1968. Ultrasonic prediction of lean cut percent in swine. J. Anim. Sci. 27:377-382. (ABA 36:3805)
- Jackson, J. W. 1968. An on-farm performance testing program that works. Proc. 11th Natl. Pork Indus. Conf. Dec. 12-13, 1968. Raleigh, N. C.
- Jantosovicova, J. 1968. Intra-testicular lymphatic system in the boar. Eng. Sum. (Slk.) Folia Vet. 12:25-29.
- Jelowicka, J. 1968. Fall in the pH of pork in relation to breed of pig. Eng. Sum. (Pol.) Rocz. Nauk. Roln. B. 90:375-383. (ABA 37:1637).
- Jensen, A. H. 1968. Some considerations relating to reproductive performance in designing confinement sow facilities. Proc. 11th Natl. Pork Indus. Conf. Dec. 12-13, 1968, Raleigh, N. C.
- Jensen, E. L., Smith, C., Baker, L. N., and Cox, D. F. 1968. Quantitative studies on blood group and serum protein systems in pigs. II. Effects on production and reproduction. J. Anim. Sci. 27: 856-862. (ABA 37:672).



1968

- Jesse, Earl F. 1968. Influence of sex and sire-sex interactions on postweaning performance and carcass traits in swine. M.S. Thesis, Okla. State U. Libr., Stillwater.
- Johnson, C. E., Reynolds, R. L., Norman, C., Kidder, H. E., and Horvath, D. J. 1968. A. I. of swine with sperm stored at room temperature. A.I. Dig. 16(6):8-9, 18. (ABA 36:3898).
- Johnson, C. L., Hillier, J. C., Whiteman, J. V., and Walters, L. E. 1968. Predicting fat trim and lean cut yield of hogs using live ultrasonic estimates. (Abs.) J. Anim. Sci. 27:1141.
- Johnson, J. N., Haugse, C. N., Dinusson, W. E., White, M., and Jensen, D. T. 1968. Water; can it affect swine performance: N. Dak. Farm Res. 25(4):11. Mar./Apr. 1968.
- Johnson, L. A. 1968. Quantitative analysis of porcine spermatozoa and seminal plasma phospholipids and phospholipid fatty acids as affected by frequency of ejaculation. Diss. Abs. 29:2182-2183B.
- Jones, A. S. 1968. Leg weakness in young pigs. PIDA Index Pig Res. pp. 17. Jan.
- Jones, J. E. T. 1968. The cause of death in sows: a one year survey of 106 herds in Essex. Brit. Vet. J. 124(2):45-55.
- Jones, P. H., and Erb, R. E. 1968. Comparison of metabolites of progesterone-4 <sup>14</sup>C in urine from a nonpregnant domestic sow. J. Anim. Sci. 27:1049-1053.
- Jones, P. H., and Erb, R. E. 1968. Levels of 5 Beta-Pregnan-3Alpha, 6Alpha-Diol-20-One in urine and its relationship to other metabolites of progesterone in urine of the nonpregnant domestic sow. J. Anim. Sci. 27:1054-1058.
- Jonsson, Per. 1968. Control and influence of muscle color. The Pork Industry: Problems and Progress. Iowa State U., Ames. pp. 105-127.
- Judge, M. D. 1968. Influence of controlled environmental temperature and humidity. The Pork Industry: Problems and Progress. Iowa State U., Ames. pp. 187-205.
- Judge, M. D. 1968. Environmental stress and meat quality. Meats Symp. Amer. Soc. Anim. Sci. Meeting July 28- August 1, 1968, Stillwater, Okla.



1968

- udge, M. D., Forrest, J. C., Sink, J. D., and Briskey, E. J. 1968. Endocrine related stress responses and muscle properties of swine. J. Anim. Sci. 27:1247-1253. (ABA 37:1638).
- udge, M. D., Briskey, E. J., Cassens, R. G., Forrest, J. C., and Meyer, R. K. 1968. Adrenal and thyroid function in stress-susceptible pigs (*Sus domesticus*). Amer. J. Physiol. 214(1):146-151.
- aczmarczyk, J., and Koczanowski, J. 1968. Effects of rearing pregnant sows of the Polish White Lop-eared breed in individual pens of limited size. Eng. Sum. (Pol.) Zesz. Nauk. Wyzsz. Szkoły. Roln. Krakow, No. 40. Zootech. 8:139-148. (ABA 37:1700).
- ahn, R. A., Cooper, R. G., Cornell, C. N., and Muhrer, M. E. 1968. Platelet morphology in bleeder swine. Trans. Mo. Acad. Sci. 1:86.
- ako, Y. 1968. Studies on muscle protein. II. Changes in beef-, pork- and chicken-proteins during the meat products manufacturing processes. Kagoshima U. Fac. Agr. Mem. 6(2):175-186.
- alan, E. B., Kraeling, R. R., and Gerrits, R. J. 1968. Isolation and partial characterization of a polymorphic swine whey protein. Fed. Proc. 27:773.
- anitz, Charles Lee. 1968. Studies of swine peripheral leukocytes in cell culture; establishment and maintenance of subcultural cell lines and investigations of in vitro phagocytosis of lymphocytes by subcultural leukocytes. M.S. Thesis, Purdue U. Libr., Lafayette.
- ao, K. Y. T., Previll, J. M., and McGavack, T. H. 1968. Protocollagen hydroxylase of pig uterus. (Abs.) Fed. Proc. 27:419.
- ao, K. Y. T., Treadwell, C. R., Previll, J. M., and McGavack, T. H. 1968. Connective tissue. 17. Protocollagen hydroxylase of pig uterus. Biochim. Biophys. Acta 151:568-572.
- aplan, F. 1968. The effect of gradual decreasing and increasing of the plane of nutrition for adult boars on ejaculated semen. Eng. Sum. (Cz.) Zivoc. Vyr. 13:351-358. (ABA 37:744).
- aplan, F. 1968. Maximum intensity of the use of boars. Eng. Sum. (Cz.) Zivoc. Vyr. 13:603-610. (ABA 37:1725).
- aplan, F. 1968. The effect of various intervals between the use of boars on the daily amount of ejaculated spermatozoa. Eng. Sum. (Cz.) Zivoc. Vyr. 13:57-62.



1968

- Kaplan, F. 1968. The effect of a prolonged gradual decrease and increase in the amount of feeding of grown boars on ejaculation of semen. Eng. Sum. (Cz.) Zivoc. Vyr. 13(5):351-358.
- Kaplan, F. 1968. Number of spermatozoa ejaculated by adult Large White boars during depletion tests. Proc. 6th Cong. Reprod. & Artif. Insem. 22-26 July 1968, Paris. p. 34.
- Kasten, L. H., Kropf, D. H., Koch, B. A., and Hines, R. H. 1968. Effect of varying sorghum grain-soybean meal ratios and added methionine on swine growth and carcass. I. Ration effects. (Abs.) J. Anim. Sci. 27:1141.
- Kasten, L. H., Kropf, D. H., Koch, B. A., and Hines, R. H. 1968. Effect of varying sorghum grain - soybean meal ratios and added methionine on growth and carcass. II. Sex ration interaction. (Abs.) J. Anim. Sci. 27:1141.
- Kastenschmidt, L. L., Moekstra, W. G., and Briskey, E. J. 1968. Glycoly intermediates and co-factors in "Fast-and Slow-Glycolyzing" muscles of the pig. J. Food Sci. 33(2):151-158.
- Katov, T., and Gower, D. B. 1968. The biosynthesis of  $5\alpha$  - androst-16-en-3-one from progesterone by boar testis homogenate. Biochim. Biophys. Acta. 164, 134.
- Kauffman, R. G. 1968. How should quality, quantity and production characteristics be weighted? Proc. 21st Annu. Recip. Meat Conf. July 1-3, 1968. Athens, Ga. pp. 273-283.
- Kauffman, R. G., Suess, G. G., Bray, R. W., and Scarth, R. D. 1968. Incidence of marbling of the bovine and porcine longissimus. J. Anim. Sci. 27:969-971.
- Keenan, T. W., and Colenbrander, V. F. 1968. Composition and synthesis of lipids in sow's milk. (Abs.) J. Anim. Sci. 27:1787.
- Kemp, J. D., Gammon, D. L., Moody, W. G., and Jacobs, J. A. 1968. Effect of fresh ham quality on aged ham quality. J. Anim. Sci. 27:366-369.
- Kemp, J. D., Moody, W. G., and Fox, J. D. 1968. Effects of fatness and fresh pork quality on yield and quality of ham and bacon. Ky. Anim. Sci. Res. Rpt. 176. pp. 19.
- Kemp, J. D., Moody, W. G., and Fox, J. D. 1968. Quality and yield of ham and bacon as affected by pork quality and fatness. (Abs.) J. Anim. Sci. 27:1142.



1968

- emp, J. D., Smith, R. H., and Moody, W. G. 1968. Quality of aged hams as affected by alternating aging temperatures. Food Technol. 22(10):113-114.
- emp, K. E. 1968. Evaluation of genetic simulation of changes in a crossbred population resulting from selection in a purebred population. Diss. Abs. 28(12,pt. 1):4821B-4822B.
- endrick, J. G., and Hassler, J. B. 1968. Toward effective standardization of hams. Amer. J. Agron. Econ. 50(4):868-878.
- ennedy, B. W., and Moxley, J. E. 1968. Comparison of techniques in the evaluation of sires and mating systems in swine. (Abs.). Proc. Gen. Soc. & West. Brch. Can. Soc. Anim. Prod. p. 28. (ABA 37:3153)
- han, F. H., and Nakra, S. K. 1968. Correction of imperforate anus and recto-vaginal fistula by operation. (swine). Indian Vet. J. 45(9):793-795.
- imura, T., and Ohno, H. 1968. Preparation of testis non-heme Fe protein and substitution for adrenodoxin by various non-heme Fe proteins in steroid 11-B-hydroxylation (pig). J. Biochem. (Tokyo) 63:716-724.
- ing, J. O. L., Ewbank, R., and Bryant, M. J. 1968. A study of the social behaviour within groups of growing pigs with special reference to the development of tail biting. PIDA Index Pig Res. 1968. pp. 46-47. Jan.
- ing, J. W. B. 1968. Crossbreeding experiments. PIDA Index Pig Res. pp. 1. Jan.
- ing, J. W. B., and Smith, C. 1968. Development of a pig sire line by selection, with immigration. (Abs.) Anim. Prod. 10(2):231-248.
- ing, J. W. B., and Strang, G. S. 1968. A study of the genetic aspects of litter productivity. PIDA Index Pig Res. pp. 12. Jan.
- ingston, C. 1968. Carcass buying. Proc. 11th Natl. Pork Indus. Conf. Dec. 12-13, Raleigh, N. C.
- leihauer, E., and Stoffler, G. 1968. Embryonic hemoglobins of different animal species. Quantitative and qualitative data about production and properties of hemoglobins during early developmental stages of pig, cattle and sheep. Mol. & Gen. Genet. 101(1):59-69.
- lima, D., and Blanka, R. 1968. Factors affecting the colour stability of hams. Rpt. of the 14th Europ. Meat Res. Conf. Brno, Cz. AMSA. p. 21.



- Klusacek, J., and Kvapil, O. 1968. Comparison of fattening ability and carcass characters of Czechoslovak Improved White and Landrace pigs, based on evaluation of genealogical lines. Eng. Sum. (Cz.) Zivoc. Vyr. 13:675-682. (ABA 37:2696).
- Koch, D. E., Parr, A. F., and Merkel, R. A. 1968. Fatty acid composition of the inner and outer layers of porcine backfat as affected by energy level, sex and sire. J. Food Sci. 33(2):176-180.
- Koch, D. E., Pearson, A. M., Magee, W. T., Hoefer, J. A., and Schweigert, B. S. 1968. Effect of diet on the fatty acid composition of pork fat. J. Anim. Sci. 27:360-365.
- Kolczak, T., and Weber, M. 1968. The proteins of exudative fluid from pale, soft, exudative pig meat. Folia Biol. (Warsaw) 16(2):137-144.
- Konig, I., Frederich, W., and Schaaf, A. 1968. Planning for pig breeding by use of artificial insemination. Eng. Sum. (Ger.) Arch. Tierzucht. 11:367-379. (ABA 37:1726).
- Kortan, L. J. 1968. Better hogs. Wld. Fmg. 10(1):12-15, 24.
- Kowalski, Z. 1968. Specific gravity of the hams as a measure of the morphological composition of the basic cuts. Eng. Sum. (Pol.) Roczn. Nauk. Roln. B. 90:385-397. (ABA 37:1639).
- Kozlovskiy, V. 1968. Breeding for quality; ways to increase pork production. U. S. Joint Publ. Res. Serv. Transl. USSR Agr. 255:36-38.
- Kraeling, R. R., Webel, S. K., Anderson, L. L., and Melampy, R. M. 1968. Autotransplantation of the hypophysis in the pig. (Abs.) J. Anim. Sci. 27:1787.
- Krasavcev, Ju. F. 1968. The chromosomes of a Large White boar. Eng. Sum. (Russ.) Tsitol. Gent. 2:165-167. (ABA 36:2825).
- Krautforst, W., and Kozlowski, M. 1968. The feed oxytetracycline in boar and gilt feeding. Eng. Sum. (Pol.) Med. Weter. (Warsaw) 25(5):278-280.
- Krehbiel, E. V., Hetzer, H. O., Flower, A. E., Harvey, W. R., and Swiger, L. A. 1968. Selection for specific combining ability in swine: postweaning traits. (Abs.) J. Anim. Sci. 27:1128.



1968

- rehbiel, E. V., Miller, C. O., Flower, A. E., Swiger, L. A., and Harvey, W. R. 1968. Relationship of parturition time and pre-weaning mortality in swine. (Abs.) J. Anim. Sci. 27:1756.
- rieg, K. 1968. Occurrence and morphology of spontaneous arteriosclerosis in domestic and wild pigs. Eng. Sum. (Ger.) Zent.B1. Vet.Med. Reihe A. 15(5):386-400.
- ropf, D. H. 1968. Application of research to meat judging activities- Identification of quality and quantity differences. Proc. 21st Annu. Recip. Meat Conf., Athens, Ga. 21:251-272.
- ropf, D. H., Kasten, L. H., Koch, B. A., and Hines, R. H. 1968. Barrow, gilt comparisons-gains and carcass composition at various ration protein levels. Proc. Kansas State U. Swine Indus. Day, Manhattan. p. 21.
- ruger, L., Wassmuth, R., Dzapo, V., and Jesswein, H. 1968. Some reflections on weight development in performance testing of breeding sows. Eng. Sum. (Ger.) Zucht.K. 40(4):284-288. (ABA 37:658).
- rzywicki, K. 1968. An attempt at improving quality of watery ham by means of quick cooling. Eng. Sum. (Pol.) Inst. Przem. Miesnego. Rocz. 5(2):23-35.
- ubek, A. 1968. Electrophoretic differences of some enzymes in body fluids of pigs. Immunogenet. Let. 5(3):120-122.
- udlac, E. 1968. Influence of progesterone on oestrus and fertility of sows. Eng. Sum. (Cz.) Vet. Med. (Praha) 13:315-322. (ABA 37:703).
- udlac, E. 1968. Directing the function of gonads and the possibility of artificial regulation of them by means of hormonal preparations in female domestic animals. (oestrus synchronization in ewes, sows, and others). Veterinaria (Sarajevo) 17(1):1-3.
- urilo, J. G. 1968. Activity and resistance of boar spermatozoa and some glicolysis ferments (Glycolytic enzymes) in conserved and nonconserved sperm. Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche Agron, France. p. 231.
- uzjmenko, L. G. 1968. Conception rate in pigs in relation to mating them in homozygous and heterozygous combinations according to transferrin type. Eng. Sum. (Russ.) Tsitol. Genet. 2:469-471. (ABA 37:674).



1968

- Kuzjmenko, L. G. 1968. Genetic polymorphism of transferrins in relation to fertility of pigs. Eng. Sum. (Russ.) Tsitol. Genet. 2:270-272. (ABA 36:3849).
- Ladan, P. E., Belkina, N. N., Stepanov, V. I., and Pod'Jacev, V. N. 1968. Muscle structure and meat quality in the pig. Eng. Sum. (Russ.) Vest. Sel.Hoz. Nauki, (Moscow) 13(7):62-68. (ABA 37:629).
- Laing, J. A. 1968. Studies on fertility and infertility in cattle, sheep and pigs. (incl. A.I. embryo mortality in pigs oestrus synchronisation in sheep). Vet. Rec. 83:65-68.
- Laird, R., and Walker-Love, J. 1968. The influence of a bio-active feed supplement on the performance and carcass quality of bacon pigs. (Abs.) Anim. Prod. 10:238.
- Lambuth, T. R., and Kemp, J. D. 1968. Effects of aging temperature on aged ham quality. (Abs.) J. Anim. Sci. 27:287.
- Lamming, G. E., and Haynes, N. B. 1968. Detection of ovulation in the sow. PIDA Index Pig Res. 1968. p. 59. Jan.
- Lamming, G. E., and Crighton, D. B. 1968. Partial early weaning and lactational anoestrus in the sow. PIDA Index Pig Res. 1968. pp. 60-61. Jan.
- Lamming, G. E., and Scofield, A. M. 1968. Studies of embryonic and foetal mortality. PIDA Index Pig Res. 1968. p. 63. Jan.
- Langlet, J. F., Ernst, E., and Glaner, H. D. 1968. The possibility of selection in pigs by ultrasonics under practical conditions. Eng. Sum. (Ger.) Z. Tierzucht. Zucht.Biol. 85:27-35. (ABA 37:1663).
- Larsen, J. T., and Rizek, R. L. 1968. The costs of feeding to heavier weights. From the Livestock and Meat Situation LMS-159. pp. 27-32.
- Lasley, J. F. 1968. Breeding and genetics as related to intrauterine disturbances in swine. (Abs.) J. Amer. Vet. Med. Assoc. 152:38-39. (ABA 36:3850).
- Lasley, J. F. 1968. Relationship of breeding and reproduction to carcass quality and quantity characteristics. The Pork Industry: Problems and Progress, Iowa State U., Ames. pp. 145-153.
- Lasley, J. F. 1968. How to get rid of recessive genes in swine. Amer. Hampshire Herdsman 43(3):22-23. March.



1968

- awrie, R. A. 1968. Meat research at Nottingham. Inst. of Meat B. 42-48.
- awrie, R. A. 1968. Chemical changes in meat due to processing - a review. J. Sci. Fd. Agr. 19:233.
- awrie, R. A. 1968. The reaction of pork muscles to accelerated freeze drying. PIDA Index Pig Res. 1968. p. 62. Jan.
- ebblanc, J., and Mount, L. E. 1968. Effects of noradrenaline and adrenaline on oxygen consumption rate and arterial blood pressure in the newborn pig. Nature 217(5123):77-78.
- ecce, J. G. 1968. Rearing piglets with an autosow. 31st Annu. Rpt. & Rec. Proc. Conf. Collab., Reg. Swine Breed. Lab., July 8-9, Raleigh, N. C. pp. 97.
- ecce, J. G. 1968. Reduced baby pig losses. (Abs.) J. Anim. Sci. 27: 294.
- est, J. A., and Roon, P. S. 1968. Pale exudative pork and its influence on finished product quality. Rpt. on the 14th European Meat Res. Conf. Brno, Cz. AMSA. p. 15.
- eidl, W., and Biergert, W. 1968. Tissue tolerance and drug transport studies of DMSO applied to the gonads of bulls and boars. J. Reprod. & Fertil. 15(1):177-180.
- igh, Abisogun Olubode. 1968. Heritabilities and covariation between dressing percentage and growth rate in swine. M.S. Thesis, Iowa State U. Libr., Ames, Iowa.
- entz, W. E. 1968. Genetic improvement of swine. Diss. Abs. 28(10): 3944B-3945B. (ABA 36:3851).
- entz, W. E., Bell, J. M., and Howell, W. E. 1968. Statistical description of the Canadian R.O.P. swine population. (Abs.) Proc. Gen. Soc. & West. Brch. Can. Soc. Anim. Prod. p. 73. (ABA 37:3154).
- eskova, R., and Onderscheka, K. 1968. Electrophoretic investigations of the colostrum and milk of swine. Eng. Sum. (Ger.) Z. Tierphysiol. Tierernahr. u. Futtermittelk. 23(5):257-262.
- euillet, M., and Salmon-Legagneur, E. 1968. Utilization of an injectable hydrogen Fe dextran compound by the sow during pregnancy and lactation. Eng. Sum. (Fr.) Ann. Zootech. (Paris) 17(1):59-70.



1968

- Leverette, R. L. 1968. The new look in meat animals. Agr. Mktg. 13(11):8-9 Nov.
- Lewis, J. E., Curtis, S. E., and Garwood, V. A. 1968. Relation between atmospheric pressure fluctuations and swine gestation length variation. Internatl. J. Biometeor. 12(2):159-162. (ABA 37:2755).
- Lewis, T. R., Suess, G. G., and Kauffman, R. G. 1968. Subjective appraisal of carcass traits in live market animals. (Abs.) J. Anim. Sci. 27:1134.
- Lidvall, E. R., Davis, D. J., and Gamble, C. T. 1968. Comparison of protein levels for finishing meat-type swine to heavier market weights. Tenn. Farm Home Sci. Prog. Rpt. 66:7-9.
- Lie, H. 1968. Thrombocytes, leucocytes and packed red cell volume in piglets during the first two weeks of life. Acta Vet. Scand. 9(2): 105-111.
- Lind, K. D., Howard, R. D., Kropf, D. H., and Koch, B. A. 1968. Effect of porcine growth hormone (PGH) and antisera on swine weighing 72 Kg. initially. I. Rate of gain and growth parameters. (Abs.) J. Anim. Sci. 27:1762-1763.
- Lind, K. D., Howard, R. D., Kropf, D. H., and Koch, B. A. 1968. Effect of porcine growth hormone (PGH) and antisera on swine weighing 72 KG initially. II. Carcass composition. (Abs.) J. Anim. Sci. 27: 1763.
- Lind, K. D., and Kropf, D. H. 1968. Effect of estrous cycle on certain characteristics of porcine skeletal muscle. (Abs.) J. Anim. Sci. 27:1143.
- Lindvall, Ronald Neal. 1968. Relationship of carcass characteristics with several ultrasonic measurements taken on young pigs. M.S. Thesis, Iowa State U. Libr., Ames, Iowa.
- Linford, E. 1968. The hexokinase of boar spermatozoa. Biochem. J. 110:45P-46P.
- Linhart, J. 1968. Further studies on the F blood group system in pigs, a new reagent, FB. Immunogenet. Let. 5(4):174-175.
- Linhart, J. 1968. Double mating of sows and potential utilisation of mixed litters in the evaluation of boars. Eng. Sum. (Cz.) Zivoc. Vyr. 13:771-778. (ABA 37:2727).



1968

- Linklater, K. A. 1968. Iso-immunisation in the parturient sow by foetal red cells. *Vet. Rec.* 68:203-204. 24 Aug.
- Linn, A. 1968. Swine estrus control and beyond. *Farm Q.* 23(4):76-79, 89.
- Liptrap, R. M., and Raeside, J. I. 1968. Effect of corticotrophin and corticosteroids on plasma ICSH and urinary steroids in the boar. *J. Endocrinol.* 42:33-43.
- Littledike, E. T., St. Clair, L. E., and Notzold, R. A. 1968. Effects of parathyroidectomy of the pig. *Amer. J. Vet. Res.* 29(3):635-642.
- Lodge, G. A., and Hardy, B. 1968. The influence of nutrition during oestrus on ovulation rate in the sow. *J. Reprod. & Fertil.* 15(2):329-332. (ABA 36:2844).
- Logtestijn, J. G. Van. 1968. Pregnancy in a hermaphrodite sow. *Eng. Sum. (Du.) Tijdschr. Diergeneesk.* 93(8):523-525.
- Lojda, L. 1968. Chromosome pattern in pigs with a congenital sexual anomaly. *Eng. Sum. (Ger.) Doc. Vet. (Brno)* 6:307-315. (ABA 37:1680).
- Lojda, L. 1968. Chromosome pattern of testicular hermaphroditism in pigs and the mode of inheritance of this defect. *Proc. 6th Internatl. Cong. Reprod. & Artif. Insem.* July 22-26, 1968. *Inst. Natl. Recherche Agron, France.* (ABA 37:675).
- Lojda, L., and Ruszova, M. 1968. Chromosome pattern of testicular hermaphroditism in a pig. *Eng. Sum. (Ger.) FortPfl. Besam. Aufzucht. Haust.* 2(6):374-382.
- Loke, K. H., and Chong-Yong, G. 1968. 14 $\alpha$ -hydroxylation of oestrone by porcine adrenals. *Steroids* 11:863-876.
- Longenecker, D. E., and Day, B. N. 1968. Fertility level of sows superovulated at post-weaning estrus. *J. Anim. Sci.* 27:709-711 (ABA 36:3875).
- Longenecker, D. E., Waite, A. B., and Day, B. N. 1968. Similarity in the number of corpora lutea during two stages of pregnancy in swine. *J. Anim. Sci.* 27:466-467. (ABA 36:3876).
- Looker, M. 1968. Smelling out boar taint. *Pig Fmg.* 16(1):22-23.



1968

- Lovell, J. E., and Getty, R. 1968. Fate of semen in the uterus of the sow: histologic study of endometrium during the 27 hours after natural service. *Amer. J. Vet. Res.* 29(3):609-625. (ABA 37:704).
- Lucas, E. W., Wallace, H. D., Palmer, A. Z., Carpenter, J. W., and Combs, G. E. 1968. The effect of diethylstilbestrol and methyltestosterone at two protein levels on the feedlot performance and carcass quality of finishing swine. *Fla. Anim. Sci. Mimeo Ser.* AN69-6.
- Lucas, E. W., Wallace, H. D., Palmer, A. Z., Carpenter, J. W., and Combs, G. E. 1968. The influence of sex, protein level and hormone supplementation on the feedlot performance and carcass characteristics of growing-finishing swine. *Fla. Anim. Sci. Mimeo Ser.* AN 69-5.
- Lucas, I. A. M. 1968. New diets for progeny testing. *PIDA Index Pig Res.* 1968 pp. 21-22. Jan.
- Lucas, I. A. M., Chamberlain, A. G., and Pickup, J. 1968. A study of the variation in pig gamma globulins in relation to active immunity. *PIDA Index Pig Res.* 1968 pp. 22-23. Jan.
- Lucas, I. A. M., and Perry, G. C. 1968. The importance of passive immunity in piglets and factors governing the acquisition of resistance to disease. *PIDA Index Pig Res.* 1968. pp. 23-24. Jan.
- Lucas, J. J., Pickett, B. W., and Komarek, R. J. 1968. Variance component estimates of some boar semen characteristics and their use in designing experiments. *J. Reprod. & Fertil.* 15(3):423-426. (ABA 36:3900).
- Lucas, L. E. 1968. New grade standards. *Hog Farm Mgt.* 5(2):26, 47.
- Lucke, J. N., Immelman, E. J., Symes, M. O., and Hunt, A. C. 1968. Use of horse anti-pig leucocyte serum to suppress the homograft reaction in pigs. *Nature* 217(5128):560.
- Ludwick, T. M., Wilson, R. F., and Woods, W. L. 1968. Cervical mucus as an indicator of estrus in gilts. (Abs.) *J. Anim. Sci.* 27:1104-1105.
- Lutz, R. 1968. Tested boar is worth more. *Wallaces Fmr.* 93(17):25.
- MacDougall, D. B., Cuthbertson, A., and Smith, R. J. 1968. A simple objective method for assessing pig meat colour. (Abs.) *Anim. Prod.* 10(2):231-248.



1968

- MacDougall, D. B., and Disney, J. G. 1968. Quality characteristics of pork with special reference to Pietrain, Pietrain x Landrace, and Landrace pigs at different weights. PIDA Index Pig Res. 1968. p. 6. Jan.
- MacGrath, W. S., Vander Noot, G. W., Gilbreath, R. L., and Fisher, H. 1968. Influence of environmental temperature and dietary fat on backfat composition of swine. J. Nutr. 96(4):461-466.
- Machlin, L. J., Horino, M., Hertelendy, F., and Kipnis, D. M. 1968. Plasma growth hormone and insulin levels in the pig. Endocrinol. 82:369-376.
- Maclean, C. 1968. Leg weakness. Pig Fmg. 16(4):40-41.
- Maclean, C. 1968. Causes of weaning stress. Pig Fmg. 16(8):37-39.
- Maclean, C. W. 1968. The thin problem of the sow. Vet. Rec. 83(13): 308-316.
- MacLeod, N. M., and Bowman, G. H. 1968. Environmental factors affecting litter performance of swine with specific reference to time trends within farrowing periods. (Abs.) Proc. Gen. Soc. & West. Brch. Can. Soc. Anim. Prod. p. 32. (ABA 37:3153).
- MacIver, R. M. 1968. Control herd and lean meat selection experiments. PIDA Index Pig Res. p. 22. Jan.
- MacPherson, J. W. 1968. Semen processing liquid and frozen. (boar). Proc. 2nd Tech. Conf. on A.I. and Reprod. Natl. Assoc. Anim. Breeders, Columbia, Mo. 62:64-67.
- Macpherson, J. W., and Dalrymple, J. R. 1968. Owner insemination of swine. A. I. Digest 16,(2), 8.
- MacPherson, J. W., and Dalrymple, J. R. 1968. How to A.I. Swine yourself. Fmr. Dig. 32(2):67-68. June - July.
- Maik, H., and Jaskowski, L. 1968. Chromosome sex determination of intersexual pigs (*Sus scrofa*). Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche Agron, France. p. 147. (ABA 37:676).
- Majerciak, P. 1968. Intrauterine influences on the rate of survival and development of the pig foetus. Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. Paris, 1968. Resumes: 97. (ABA 37:705).



1968

- Majerciak, P., and Bori, M. 1963. Evaluation of performance of Czechoslovakian Improved White and Landrace sows during pregnancy and the two-month suckling period. Eng. Sum. (Slov.) Zivoc. Vyr. 6:53-74. (ABA 37:3883).
- Majerciak, P., Cupka, V., and Poltarsky, J. 1968. Evaluation of meat formation and fat deposition based on a detailed analysis of carcasses of pigs of various weights. Zivoc. Vyr. 6:223-236. (ABA 37:3825).
- Major, F., Dinklage, H., and Gruhn, R. 1968. Investigation of the relationship between various European populations of Landrace pigs by blood group factors. Eng. Sum. (Ger.) Zucht.K. 40:347-352. (ABA 37:1683).
- Mandigo, R. W. 1968. The influence of prechill processing on pork products. Diss. Abs. 28(12, Pt. 1):4817B-4818B.
- Mandigo, R. W., Pate, T. D., and Shuler, R. O. 1968. Ham color and color stability as influenced by confinement and floor structure. (Abs.) J. Anim. Sci. 27:1763.
- Manfredini, M., Monetti, P. G., and Mordenti, A. 1968. Effects of castration in male pigs slaughtered at 95 kg. live weight. III. Economic aspects. Eng. Sum. (Ital.) Atti. Soc. Ital Sci. Vet. 1967, 21:464-468. (ABA 37:1641).
- Manfredini, M., and Palenzona, D. 1968. Backfat thickness and fat distribution in pigs. Eng. Sum. (Ital.) Riv. Zootec. Agr. Vet. 6:430-444. (ABA 37:3826).
- Marjanov, M. 1968. Effect of single, repeated and double service of sows on litter size. Eng. Sum. (Ser.) Veterinaria, (Sarajevo) 17:359-366. (ABA 37:1702).
- Marjanov, M. 1968. The use of pregnant mare serum (PMS) for anoestrous sows in intensive breeding. Eng. Sum. (Ser.) Veterinaria (Sarajevo) 17:159-165. (ABA 36:3877).
- Markham, K. 1968. Replacement of prolapsed uterus in a sow. Vet. Rec. 82(21):605-606.
- Marks, H. F. 1968. Pig industry statistics, with information on cattle and sheep. Pig. Indus. Dev. Auth. London.
- Marple, D. N., Topel, D. G., and Matsushima, C. Y. 1968. Effect of pre-slaughter exercise on porcine muscle and plasma. (Abs.) J. Anim. Sci. 27:1763-1764.



1968

- Marrable, A. W. 1968. Ischaemic extremities of the allantochorion of the pig and their relation to the endometrium. *Res. Vet. Sci.* 9:578-582.
- Marshall, J. E., Watson, J. H., and Slattery, A. 1968. Prediction of eye-muscle area from introscope measurements on carcasses of pigs of bacon weight. *Anim. Prod.* 10(3):283-288. (ABA 36:3811).
- Martin, A. H., Fredeen, H. T., and Stothart, J. G. 1968. Taste panel evaluation of sex effects on the quality of cooked pork. *Canad. J. Anim. Sci.* 48(2):171-179.
- Martin, M. O. 1968. A study on the nursing habits of pigs. *Araneta J. Agr.* 15(2):67-84.
- Masincupp, F. B., and Meacham, T. N. 1968. Confinement vs. open lot environments on reproductive performance and blood components of sows. *Va. Agr. Expt. Sta. Res. Rpt.* 126:89-92.
- Matousek, J. 1968. Blood group A system in the reproduction of pigs. *Eng. Sum. (Cz.) Zivoc. Vyr.* 13(41):417-422. (ABA 37:677).
- Matousek, J., Dostal, J., and Valenta, M. 1968. Protein polymorphism in the fluids of accessory genital glands in boars. (Abs.) *Proc. XIIth Internatl. Cong. Genet. Tokyo, 1968, Vol. I*:279. (ABA 37:1684).
- Maxson, D. W., Stanley, G. R., Perry, T. W., Pickett, R. A., and Curtin, T. M. 1968. Influence of various ratios of raw and gelatinized corn, oats, oat components and sand on the incidence of esophagogastric lesions in swine. *J. Anim. Sci.* 27(4):1006-1010.
- Mazzarri, G., Du Mesnil Du Buisson, F., and Ortavant, R. 1968. Action of temperature on spermatogenesis, sperm production, and fertility of the boar. *Proc. 6th Internatl. Cong. Reprod. Artif. Insem. Paris, 1968. Resumes*: 71. (ABA 37:707).
- McClain, P. E., Pearson, A. M., Fennell, R. A., and Merkel, R. A. 1968. Metachromasia of epimysial connective tissues from normal and from pale, soft, and exudative porcine muscle. *Proc. Soc. Expt. Biol. Med.* 128:624.
- McClellan, R. O. 1968. Applications of swine in biomedical research. *Lab. Anim. Care.* 18:120-126. (ABA 37:1140).
- McFee, A. F., and Eblen, J. R. 1968. Testicular development in miniature swine. *J. Anim. Sci.* 26(4):772-776.



1968

- McGloughlin, P. 1968. Sire by sex interactions in boar proving. Irish J. Agr. Res. 7:301-307. (ABA 37:1632).
- McLaren, J. B., and Smith, H. J. 1968. Rotational crossbreeding in commercial swine production. Tenn. Farm Home Sci. Prog. Rpt. 66:18-22.
- McLoughlin, J. V. 1968. Sarcoplasmic and myofibrillar protein in skeletal muscle of two breeds of pig. J. Food Sci. 33(4):383-385.
- McSweeney, R. D., Huber, C. S., Judge, M. D., and Stadelman, W. J. 1968. Effects of freezing rate and freeze-drying on the solubility of muscle proteins. III. Ovine and porcine. (Abs.) J. Anim. Sci. 27:1763.
- Meacham, T. N., McVeigh, C. J. D., and Thomas, H. R. 1968. Influence of lactation interval on subsequent reproduction in the sow. Va. Agr. Expt. Sta. Res. Rpt. 126:98-101.
- Meade, R. J., Vermedahl, L. D., and Rust, J. W. 1968. Effect of protein content of diet prior to 22.7 kg. on subsequent performance and carcass quality in swine. (Abs.) J. Anim. Sci. 27:1154.
- Meade, R. J., Grant, R. S., Vermedahl, L. D., and Wass, D. F. 1968. Age at weaning, kind and protein content of starter. IV. Effects on composition of lean tissue. (Abs.) J. Anim. Sci. 27:1154-1155.
- Meding, J. H., and Rasbech, N. O. 1968. Investigations on artificial insemination in pig breeding. V. A report from the Hattings Boar Testing Station. Aarsberet. Inst. Sterilitetsforsk. K. Vet.-og. Landbohøjsk. 1968:65-79. (ABA 37:1728).
- Melampy, R. M., and Anderson, L. L. 1968. Role of the uterus in corpus luteum function. J. Anim. Sci. 27(Supl. 1):77-96.
- Mellish, K. S., Baker, R. D., and Moxley, J. E. 1968. Transport of F.I.T.C. (fluorescein isothiocyanate) conjugated and unmarked sperm within gilts. (Abs.) J. Anim. Sci. 27:1787-1788.
- Melrose, D. R., Reed, H. C. B., and Pratt, J. H. 1968. Developments in the use of pig A.I. by the farmer. Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche Agron, France. p. 181. (ABA 37:747).
- Merkel, R. A. 1968. Implication of the circulatory system in skeletal muscle to meat quality. Proc. 21st Annu. Recip. Meat Conf. July 1-3, 1968, Athens, Ga. pp. 204-215.



1968

- Merkel, R. A., Ullrey, D. E., Bradley, B. L., Miller, E. R., Koch, D. E., and Weatherspoon, J. B. 1968. Relationship of certain hematological parameters to porcine muscle properties. (Abs.) J. Anim. Sci. 27:1144.
- Meyer, H., and Drommer, W. 1968. Hereditary hypotrichosis in pigs. Eng. Sum. (Ger.) Deut. Tierarztl. WchnSchr. 75:13-18. (ABA 36:3852).
- Meyer, D. L., Waitt, W. P., Baker, D. H., Melliore, A. L., and Jordan, C. E. 1968. Effects of a dietary combination of diethylstilbestrol and methyltestosterone on reproductive performance of gilts. J. Anim. Sci. 27(4):1045-1048. (ABA 37:708).
- Meyer, H., and Plonait, H. 1968. An inherited disorder of calcium metabolism in the pig (hereditary rickets). Eng. Sum. (Ger.) Zent.Bl. Vet. Med. Reihe A. 15(6):481-493.
- Miller, E. R. 1968. Rations for early-weaned pigs and effects on carcass. Proc. 11th Natl. Pork Indus. Conf. Dec. 12-13, 1968, Raleigh, N. C.
- Miller, E. R., Lumb, S. A., Ullrey, D. E., Liptrap, D. O., and Bradley, B. L. 1968. Evaluation of testosterone with iron dextran for baby pigs. (Abs.) J. Anim. Sci. 27:1777-1778.
- Miller, O. C., and Dziuk, P. J. 1968. Migration of embryos in the anastomosed uterine horns of the pig. Anat. Rec. 162(2):137-138.
- Miller, W. O., Saffle, R. L., and Zirkle, S. B. 1968. Factors which influence the water holding capacity of various types of meat. Food Technol. 22(9):89-92.
- Milojic, M., and Simovic, B. 1968. Age of gilts at first farrowing and their fertility. Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche Agron. France. p. 336. (ABA 37:709).
- Milojic, M., and Simovic, B. 1968. Effect of age at first farrowing on subsequent reproduction (pig). Eng. Sum. (Ser.) Zborn. Rad. Poljopr. Fak. U. Beogradu. 14(427):10 p.
- Milosavljevic, S., Nikolic, M., Sovljanski, B., and Bokorov, T. 1968. The effect of the body weight of the sow on the number and weight of viable piglings and on the percentage of stillborn piglings per litter. Eng. Sum. (Ser.) Vet. Glasn. 22:455-460. (ABA 36:3880).



1968

- Milosavljevic, S., Bokorov, T., Sovljanski, B., and Nikolic, M. 1968. The effect of weight of sows of first and second parturition on the number and weight of alive and the percentage of stillborn baby pigs. Eng. Sum. (Ser.) Vet. Glas. 22(5):461-468. (ABA 36:3879).
- Misch, K. A., and Forrest, H. 1968. Testicular heterotopia in a pig. J. Path. & Bact. 95(2):555-556.
- Mitchell, D. 1968. Vaginal biopsy findings in sows returning to service. Proc. 6th Internatl. Cong. Reprod. Artif. Insem. Paris. 1968. Resumes. pp. 99. (ABA 37:710).
- Mizuma, Y. 1968. Animal (cattle, sheep, horse, pig) and poultry breeding in Japan. World Rev. Anim. Prod. 4:20-24.
- Mogi, K., Oishi, T., Abe, T., Himeno, K., and Hosoda, T. 1968. Studies on the hemolytic disease of newborn pigs. IV. Distribution of blood group antibodies in the serum of pig, and analysis of the cause of antibody production. Eng. Sum. (Jap.) Jap. J. Zootech. Sci. 39(4):175-179.
- Monetti, P. G., Mordenti, A., Manfredini, M., and Santoro, P. 1968. Effects of castration in male pigs slaughtered at 95 kg. live weight. I. Gains and food conversion. Eng. Sum. (Ital.) Atti. Soc. Ital. Sci. Vet. 1967, 21:455-458. (ABA 37:1660).
- Moody, W. G., and Cassens, R. G. 1968. Histochemical differentiation of red and white muscle fibers. J. Anim. Sci. 27:961-968.
- Moor, R. M. 1968. Effect of embryo on corpus luteum function (pig). J. Anim. Sci. 27, Suppl. 1:97-118.
- Mordenti, A., Manfredini, M., Monetti, P. G., and Barbieri, L. 1968. Effects of castration in male pigs slaughtered at 95 kg live weight. II. Carcass quality. Eng. Sum. (Ital.) Atti. Soc. Ital. Sci. Vet. 1968, 21:458-464. (ABA 37:1642).
- Morehouse, L. G., Kintner, L. D., and Nelson, S. L. 1968. Rabies in swine. Amer. Vet. Med. Assoc. J. 153(1):57-64.
- More O'Ferrall, G. J., Hetzer, H. O., and Gaines, J. A. 1968. Heterosis in preweaning traits of swine. J. Anim. Sci. 27:17-21. (ABA 36:2829).
- Morrisette, M. C., and Omtvedt, I. T. 1968. Influence of an orally active progesterone and diethylstilbestrol on litter size and weights of pigs. Amer. J. Vet. Res. 29:271-273. (ABA 37:711).



1968

- Morrison, S. R., Bond, T. E., and Heitman, H. Jr. 1968. Effect of humidity on swine at high temperature. Trans. Amer. Soc. Agr. Engrs. 11:526.
- Morrison, S. R., Bond, T. E., and Heitman, H. 1968. The physiological response of swine to wetting. Trop. Agr. (St. Augustine) 45(4): 279-287.
- Morrison, S. R., Hintz, H. F., and Givens, R. L. 1968. A note on effect of exercise on behaviour and performance of confined swine. Anim. Prod. 10(3):341-344. (ABA 36:3812).
- Morrison, W. R. 1968. The distribution of phospholipids in some mammalian milks. Lipids 3:101.
- Moskal, V. 1968. Influence of sex on fattening ability and carcass characteristics of Black and White Prestice pigs. Eng. Sum. (Cz.) Zivoc. Vyr. 13:669-674. (ABA 37:2704).
- Moulick, S. K., Gupta, S., and Bhattacharya, S. 1968. Studies on litter size and birthweight in large white pigs. Indian J. Vet. Sci. Anim. Husb. 38(2):149-159.
- Mount, L. E. 1968. The climatic physiology of the pig. Monogr. Physiol. Soc. No. 18. (ABA 37:2105).
- Mount, L. E. 1968. Piglet behaviour. Pig Fmg. 16(11):106 Nov.
- Mount, L. E. 1968. How sows and boars behave. Pig Fmg. 16(9):88. Sept.
- Mount, L. E. 1968. Adaptation of swine. In Hafez, E.S.E. Adaptation of Domestic Animals. pp. 277-291.
- Muehling, A. J. 1968. Influence of environment on swine performance. Hog Farm Mgt. 5(12):48-49.
- Mullaney, Peter Daniel. 1968. Effects of paternal x-irradiation on litter size and early post-natal mortality in swine. Ph.D. Thesis, Iowa State U. Libr., Ames. Also Diss. Abs. 29:1266B-1267B. (ABA 37:1704).
- Muthiah, P. L., Ramanathan, N., and Nayudamma, Y. 1968. Biochemical studies of the skin samples obtained from different sites on various animals. Amer. Leather Chem. Assoc. J. 63(1):38-46.



1968

- Nacht, S., Lee, G. R., and Cartwright, G. E. 1968. Large scale preparation of porcine ceruloplasmin. (Abs.) Fedn. Proc. Fedn. Amer. Socs. Expt. Biol. 27:482.
- Nash, W. G. 1968. What performance testing has accomplished in my herd. Proc. 11th Natl. Pork Indus. Conf. Dec. 12-13, 1968. Raleigh, N. C.
- Navratil, S., Hronova, B., and Lojda, L. 1968. Endocrinological study of inherited intersexuality in pigs. Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche Agron. France.
- Neher, G. M., Rossel, O. F., and Oliver, J. W. 1968. Clinical signs and histochemical changes in the reproductive tracts of male swine with <sup>90</sup>Sr induced hypopituitarism. (Abs.) J. Amer. Vet. Med. Assoc. 152(9):1305-1358.
- Nichelmann, M., and Lyhs, L. 1968. Pig shower to relieve thermoregulation and improve hygiene. Eng. Sum. (Ger.) Mon.H. Vet. Med. 23(10):374-376.
- Niezgoda, J., Kolczak, T., and Wojtas, M. 1968. The level of some blood indicators and PH of urine in pigs with watery structure of meat tissue. Eng. Sum. (Pol.) Med. Weter. 24(11):686-690.
- Nikolic, M., and Celikovic, E. 1968. Variability and heritability of some characters in Dutch and Swedish Landrace pigs. Eng. Sum. (Ser.) Veterinaria, (Sarajevo) 17:451-456. (ABA 37:2706).
- Nishikawa, Y., Niwa, T., and Sakai, Y. 1968. Studies on synchronisation of estrus in pigs with methalibure in Japan. Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche Agron. France. p. 290. (ABA 37:712).
- Niswender, G. D. 1968. Direct effects of embryos and the uterus on the function of corpora lutea in sheep and swine. Diss. Abs. 28:4825B.
- Norrish, J. G., Barr, G. R., Denniss, R. H., and Ingram, R. H. 1968. Swine breeding in Ontario. Ontario Dept. Agr. Publ. 500 35 p.
- Norrish, J. G., Bowman, G. H., Ingram, F. H., and Miniats, O. P. 1968. Performance of partially and completely castrated pigs. Canad. J. Anim. Sci. 48(1):27-33. (ABA 36:3813).



1968

- Norrish, J. G., and Burgess, T. D. 1968. Estrus control in swine through management and by the oral administration of megestrol acetate. *Canad. Vet. J.* 9(5):116-119. (ABA 37:713).
- Norrish, J. G., and Rennie, J. C. 1968. Observations on the inheritance of atresia ani in swine. *J. Hered.* 59(3):186-187. (ABA 37:2737).
- Nuttall, R. J. 1968. Batch farrowing of swine through ovulation control with Aimax. *Proc. 11th Natl. Pork Indus. Conf.* Dec. 12-13, 1968, Raleigh, N. C.
- Obel, A. L. 1968. Epithelial changes in porcine exudative epidermitis; the light-microscopical picture. *Path. Vet.* 5(3):253-269.
- O'Brien, J. J. 1968. Survey of the incidence of gastric ulceration (pars oesophagea) in bacon pigs in Ireland. *Vet. Rec.* 83(10):245-248.
- O'Bryant, J. B. 1968. Here's how the price of live hogs is determined. *Natl. Provis.* 159(7):14-19.
- Ockerman, H. W., and Cahill, V. R. 1968. Water extractability of muscle protein and factors which affect this procedure as a method of determining pork quality. *J. Anim. Sci.* 27:31-38.
- O'Hea, E. K., and Leveille, G. A. 1968. Lipid metabolism in isolated adipose tissue of the domestic pig (*sus domesticus*). *Compar. Biochem. Physiol.* 26(3):1081-1089.
- Ollivier, L. 1968. A study of the genetic determination of muscular hypertrophy in the Pietrain pig. (Abs.) *Proc. XIIth Internatl. Cong. Genet., Tokyo, 1968, Vol. I*:276. (ABA 37:1685).
- Omtvedt, I. T. 1968. What are performance records worth? *Rec. Proc. 10th Okla. Swine Short Course.* pp. 35-42.
- Omtvedt, I. T. 1968. Some heritability characteristics and their importance in a selection program. The Pork Industry: Problems and Progress, Iowa State U., Ames. pp. 128-135.
- Omtvedt, I. T. 1968. 1700 litter study shows benefits of cross-breeding. *Natl. Hog Fmr.* 13(10):26-28. Jan.
- Omtvedt, I. T., and Jesse, E. J. 1968. Influence of sex and sire-sex interactions in swine. (Abs.) *J. Anim. Sci.* 27:285.



1968

- Osbaldeston, G. W. 1968. Cytology of the blood of domestic animals - the numbers of blood elements in normal animals. *Veterinarian* (Oxford) 5, 33.
- Osinga, A., DeHaan, C., Cop, W. A. G., and Stegenga, Th. 1968. Oestrus synchronization and milk ejection in pigs treated with ICI compound 33.828 and gonadotropins. *Proc. 6th Internatl. Cong. Reprod. & Artif. Insem.* July 22-26, 1968. *Inst. Natl. Recherche Agron.*, France. p. 291. (ABA 37:714).
- Otto, E. 1968. Contribution on the course of increase in backfat and back muscle in growing pigs. *Eng. Sum. (Ger.) Arch. Tierzucht.* 11:471-492. (ABA 37:3845).
- Overfield, J. R., Cromwell, G. L., and Hays, V. W. 1963. Performance of SPF Yorkshire herd at West Kentucky Substation from 1963 to 1967. *Ky. Anim. Sci. Res. Rpt.* 176. p. 62.
- Owen, J. B., and Ridgman, W. J. 1968. Further studies on the effect of dietary energy content on the voluntary intake of pigs. *Anim. Prod.* 10(1):85-91.
- Owen, J. B., and Ridgman, W. J. 1968. The effect of stage of growth and dietary bulk in the voluntary intake and efficiency of food conversion in pigs. *PIDA Index Pig Res.* pp. 34-35. Jan.
- Palmer, W. M., Teague, H. S., and Grifo, A. P. Jr. 1968. Effects of pantothenic acid on the reproductive performance of gilts. Swine Research Ohio Res. & Dev. Cntr. Res. Sum. 29:13-16.
- Pani, S. N. 1968. Maternal influence in animals; a review (pig). *World Rev. Anim. Prod.* 4:88-99.
- Parsons, L. E. 1968. Estradiol metabolism in normal and hypertensive swine arteries. *Diss. Abs.* 28(12, pt. 1):5184B.
- Paska, I. 1968. Influence of Landrace blood on development of the ham in the Improved White pig. *Eng. Sum. (Cz.) Zivoc. Vyr.* 13: 583-592. (ABA 37:1646).
- Passbach, F. L. Jr., Rogers, R. W., Diggs, B. D., and Baker, B. Jr. 1968. Effects of limited feeding on market hogs: Performance and quantitative and qualitative carcass characteristics. *J. Anim. Sci.* 27:1284-1289.
- Passbach, F. L. Jr., Mullins, A. M., and Wipf, V. K. 1968. Influence of aldosterone on PSE pork muscle. (Abs.) *J. Anim. Sci.* 27:1145.



1968

- Patterson, R. L. S. 1968. Identification of 3 alpha-hydroxy-5 alpha androst-16-ene as the musk odour component of boar submaxillary salivary gland and its relationship to the sex odour taint in pork meat. *J. Sci. Food & Agr.* 19(8):434-438.
- Patterson, R. L. S. 1968. 5  $\alpha$ -androst-16-ene-3-one: - compound responsible for taint in boar fat. *J. Sci. Food & Agr.* 19(1):31-38.
- Patterson, R. L. S. 1968. Investigation of boar taint. *World Rev. Anim. Prod.* 4:72-77.
- Patterson, R. L. S. 1968. Acidic components of boar preputial fluid. *J. Sci. Food & Agr.* 19(1):38-40.
- Paulsen, A. A., and Harmel, R. 1968. Efficiency of grain conversion. The Pork Industry: Problems and Progress. Iowa State U., Ames. p p. 35-42.
- Pavlicenko, V. P., and Dorozilov, A. E. 1968. Increasing the heterosis effect in pigs by the injection of blood from another breed. *Eng. Sum. (Russ.) Sel'khoz. Biol.* 3:250-254. (ABA 37:633).
- Pavlik, J., Fiedler, J., and Siler, R. 1968. Development and structure of the Cornwall pig population in districts of Czechoslovakia in 1954-1964. *Eng. Sum. (Cz.) Zivoc. Vyr.* 13:49-56. (ABA 36:2773).
- Pavlovsky, V., and Belic, L. 1968. The effect of gamma globulins on the mortality of baby pigs. *Eng. Sum. (Ser.) Vet. Glasn. (Belgrade)* 22(8):687-690.
- Pease, A. 1968. Herd index-how it works. *Pig Fmg.* 16(6):33.
- Pease, A. H. R. 1968. Progress report on PIDA's combined testing. (Abs.) *Anim. Prod.* 10(2):231-248.
- Pekas, J. C. 1968. Versatile swine laboratory apparatus for physiologic and metabolic studies. *J. Anim. Sci.* 27:1303-1306.
- Perry, T. W. 1968. Swine ulcers, a growing concern. *Fmrs. Dig.* 32(6):64-66. Dec.
- Persi, A. R. 1968. Canada announces new grading system for market hogs. *Foreign Agr.* 6(32):13.
- Peters, J. B., Short, R. E., First, N. L., and Casida, L. E. 1968. Ovarian and pituitary gland changes in hysterectomized postpartum sows treated with FSH and Oxytocin. *J. Anim. Sci.* 27(4):1027-1031.



1968

- Peters, J. B., First, N. L., and Casida, L. E. 1968. Effect of oxytocin injection, pig removal and teat removal of follicular fluid and uterine weight in postpartum sows. (Abs.) J. Anim. Sci. 27:1195-1196.
- Pezacki, W., Alexandrowicz, S., Cybulko, B., and Maruniewicz, W. 1968. Attempt to determine the quantity of meat and fat in bacon carcasses on the basis of specific gravity. Eng. Sum. (Pol.) Roczn. Nauk. Roln. B. 90:355-373. (ABA 37:1647).
- Pfander, W. H., Royer, R. F., and Tribble, L. F. 1968. Changes in free amino acid levels in the blood of growing swine as an index to protein quality and availability. Mo. Agr. Expt. Sta. Res. B. 938.
- Pfau, A. 1968. Remission spectrophotometric examination of open meat surfaces in the M. longissimus dorsi of the pig in relation to the time which had elapsed post mortem. Eng. Sum. (Ger.) Fleischwirtschaft 48(6):819-822.
- Pfeiffer, H. 1968. Nutrient retention of pure-bred and cross-bred pigs during growth. Eng. Sum. (Ger.) Arch. Tierzucht. 11(3/4):277-296.
- Phelps, Anthony. 1968. Breeding for gilts. Pig Fmg. 16(12):22-23. Dec.
- Phillippo, M. 1968. Superovulation in the pig. Advances in Reproductive Physiology. 3:147-165.
- Picha, J., and Pichova, D. 1968. Study of relationship between thyroid gland function and growth of Landrace, Czechoslovak White Improved and Cornwall gilts. Eng. Sum. (Cz.) Zivoc. Vyr. 13:683-690. (ABA 37:2721).
- Pierce, E. A. 1968. The New York swine improvement program. Cornell U. Ext. B. 1206, 15 p.
- Plager, C. 1968. Hog carcass grades modernized. Hormel Fmr. 32(6): 7.(Feb. 15).
- Plager, W. L. 1968. Hog sense and common sense. Yorkshire J. 19(3): 6-8.
- Plocek, F. 1968. Determination of genetic correlations among some carcass value characters in Improved White pigs. Eng. Sum. (Cz.) Zivoc. Vyr. 13:567-574. (ABA 37:1638).
- Plocek, F. 1968. Effect of individual and group feeding on results of feeding and carcass character tests in pigs. Eng. Sum. (Cz.) Zivoc. Vyr. 13:717-723. (ABA 37:2738).



1968

- Pocock, E. F., and Bayley, H. S. 1968. Dietary factors affecting the development of gastric ulcers in swine. (Abs.) J. Anim. Sci. 27:1779.
- Pocock, E. F., Bayley, H. S., and Roe, C. K. 1968. Relationship of pelleted, autoclaved and heat expanded corn or starvation to gastric ulcers in swine. J. Anim. Sci. 27:1296-1302.
- Podany, J., and Muzikant, J. 1968. Effect of atropine and oxytocin on the course of ejaculation, quantity and quality of semen of the boar. Acta U. Agr. Fac. Vet. 37:569-579. (ABA 37:3906).
- Podany, J., and Muzikant, J. 1968. Modification of the methods of the boar sperm reduction, resistance and survival tests. Eng. Sum. (Russ.) Doc. Vet. (Brno) 6:149-157.
- Podany, J., Muzikant, J., and Linhart, J. 1968. Application of heterospermic insemination to the evaluation of boar fertility. Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche Agron. France. p. 254. (ABA 37:750).
- Poff, G. M. 1968. Relationship of arterial hypertension and sex to arterial acid mucopolysaccharides in swine. Diss. Abs. 28:3455B.
- Polge, C. 1968. Control of oestrus, ovulation and A.I. in pigs. Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche Agron. France. p. 294. (ABA 37:715).
- Polge, C. 1968. Control of estrus and ovulation in pigs. Vet. Rec. 83(24):630.
- Polge, C. 1968. Controlled breeding and A.I. in pigs. Artificial Breeding of Farm Animals, Crowley, Gilsenan (eds.) :78-86. (ABA 36:4209).
- Polge, C. 1968. Recent developments and prospects in physiological research basic to artificial breeding. Animal Breeding in the age of A.I. Proc. Sympos. U. Wis. - ABS. Feb. 29-Mar. 1, 1968. Madison, Wis. p. 149-170.
- Polge, C., and Day, B. N. 1968. Pregnancy following non-surgical egg transfer in pigs. Vet. Rec. 82:712. (ABA 36:3381).
- Polge, C., Day, B. N., and Groves, T. W. 1968. Synchronisation of ovulation and artificial insemination in pigs. Vet. Rec. 83: 136-142.



1968

- Polge, C., and Frederick, G. L. 1968. Culture and storage of fertilized pig eggs. Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. Paris. July 22-26, 1968.
- Politzer, N., and Osterhoff, D. R. 1968. The use of serum typing to estimate the degree of inbreeding in Landrace pigs. Proc. S. Afr. Soc. Anim. Prod. 7:185-186. (ABA 37:3872).
- Pond, W. G., Dunn, J. A., Wellington, G. H., Stouffer, J. R., and Van Vleck, L. D. 1968. Weight gain and carcass measurements of pigs from gilts fed adequate vs. protein free diets during gestation. J. Anim. Sci. 27(6):1583-1586.
- Pond, W. G., Wagner, W. C., Dunn, J. A., and Walker, E. F. Jr. 1968. Reproduction and early post-natal growth of progeny in swine fed a protein-free diet during gestation. J. Nutr. 94(3):309-316. (ABA 36:3882).
- Pond, W. G., Banis, R. J., Van Vleck, L. D., Walker, E. F. Jr., and Chapman, P. 1968. Age changes in body weight and in several blood components of conventional versus miniature pigs. Proc. Soc. Expt. Biol. Med. 127:895.
- Pond, W. G., and Walker, E. F. Jr. 1968. Protein and amino acids for reproduction and growth of swine. Proc. 1968 Cornell Nutr. Conf. Feed. Mfrs. p. 66.
- Poole, H. R. Jr., Foley, C. W., Wolfe, S., and Harrington, R. B. 1968. Buffering capacity characteristics of boar semen. (Abs.) J. Anim. Sci. 27:1757.
- Pope, C. E., Vincent, C. K., and Thrasher, D. M. 1968. Effect of I.C.I. 33,828 and PMS on reproduction in gilts. (Abs.) J. Anim. Sci. 27:303.
- Popovici, F., and Paraschivescu, G. 1968. The carcass quality evaluation indices required for the action of selection with the pig breeds reared in our country in the existing breeding stage. Eng. Sum. (Rum.) Lucr. Sti. Inst. Cercet. Zooteh. (Bucharest) 26:317-328. (ABA 36:3815).
- Prietz, G., Pelzer, H. H., and Rotermund, L. 1968. Clinical and economic aspects of boar castration. Eng. Sum. (Ger.) Mon.H. Vet. Med. 23:499-501.
- Psota, T. 1968. The effect of tissue biostimulators on the growth of pigs during fattening. Eng. Sum. (Cz.) Zivoc. Vyr. 13(5):359-366. (ABA 37:651).



1968

- Pursel, V. G., Johnson, L. A., and Gerrits, R. J. 1968. GOT & LDH enzyme activities in cold-shocked and frozen boar semen. (Abs.) J. Anim. Sci. 27:1788.
- Quass, D. W., and Briskey, E. J. 1968. A study of certain properties of myosin from skeletal muscle. (Swine). J. Food Sci. 33(2): 180-187.
- Quass, D. W., and Briskey, E. J. 1968. Influence of temperature on myosin from porcine skeletal muscle. (Abs.) J. Anim. Sci. 27: 1145-1146.
- Quick, T., and Oppedal, A. 1968. Ovulation control: Will it start a "Farrowing Revolution"? Hog Farm Mgt. 5(7):12-14, 52-53.
- Raeburn, J. R., Blair, R., and English, P. R. 1968. Study of factors affecting lean meat development. PIDA Index Pig Res. pp. 27-28, Jan.
- Raeburn, J. R., English, P. R., and Mackenzie, R. M. 1968. A study of sow and piglet behaviour with particular reference to predisposing causes of piglet mortality. PIDA Index Pig Res. pp. 28-29. Jan.
- Raeburn, J. R., and Ward, J. 1968. A review from an economic standpoint of the scientific literature on pig production problems and a compilation of an index of economic data of particular significance to the pig industry of the United Kingdom. PIDA Index Pig Res. pp. 29-30. Jan.
- Rahelic, S., and Rede, R. 1968. Relation between connective tissue content and WHC in some pig and beef muscles. Rpt. 14th Europ. Meat Res. Conf., Brno, Cz. AMSA, Chicago p. 14.
- Raicu, E., Georgescu, D., Tascenco, V., Constantinescu, E., Rosca, N., and Bem, C. 1968. The effect of rations with various caloric-proteide ratios upon growing in weight and carcass quality in pigs. Eng. Sum. (Rum.) Lucr. Sti. Inst. Cercet. Zooteh. (Bucharest) Stiint. 26:329-340.
- Raithby, G. E. 1968. Crossbreeding in market stock. Canad. Swine 29(2):5.
- Ramage, D. R. 1968. Ways to improve litter size through management. Proc. 11th Natl. Pork Indus. Conf. Dec. 12-13, 1968. Raleigh, N. C.
- Rao, A. T., and Iyer, P. K. R. 1968. Histopathological observations in some of the endocrine organs in experimental swine fever. Indian J. Vet. Sci. Anim. Husb. 38(2):174-178.



1968

- Rao, P. L. N., Reddy, K. S., Pillai, K. J., Rao, N. S., and Varadarajulu, P. 1968. Studies on the relationship of carcass yield, certain wholesale cuts and offals to the live weight in pigs. Indian Vet. J. 45:866-873. (ABA 37:1648).
- Rary, J. M., Henry, V. G., Matschke, G. H., and Murphree, R. L. 1968. The cytogenetics of swine in the Tellico Wildlife Management Area, Tennessee. J. Hered. 59:201-204. (ABA 37:2739).
- Rasch, D., and Herrendorfer, G. 1968. Statistical investigation of selection on quantitative characters. III. Number and size of test groups per boar in fattening and carcass tests. Eng. Sum. (Ger.) Arch. Tierzucht. 11:459-470. (ABA 37:3873).
- Rathmacher, R. P., and Anderson, L. L. 1968. Blood flow and progesterone levels in the ovary of cycling and pregnant pigs. Amer. J. Physiol. 214(5):1014-1018.
- Reddy, S. G., and Henrickson, R. L. 1968. Quality of prechilled canned porcine muscle. (Abs.) J. Anim. Sci. 27:1146.
- Reed, H. C. B. 1968. Application of controlled ovulation in A.I. of pigs. Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche Agron. France. p. 294. (ABA 37:718).
- Reed, H. C. B. 1968. A. I. - practical aspects (pig). (Abs.) Vet. Rec. 83:629-630.
- Reed, H. C. B. 1968. Semen delivery service - a new development of pig AI. (Abs.) Anim. Prod. 10(2):231-248.
- Reed, R., and Todd, P. M. 1968. An electron microscope study of the distribution of connective tissue fibrils in pig muscle and their relation to sarcolemma. PIDA Index Pig Res. pp. 44-45. Jan.
- Reid, J. T., Bensadoun, A., Bull, L. S., Burton, J. H., Gleeson, P. A., Han, I. K., Joo, Y. D., Johnson, C. E., McManus, W. R., Paladines, O. L., Stroud, J. W., Tyrell, H. F., VanNiekerk, B. D. H., Wellington, G. H., and Wood, J. D. 1968. Changes in body composition and meat characteristics accompanying growth of animals. Proc. 1968 Cornell Nutr. Conf. Feed Mfrs. p. 18.
- Reid, J. T., Bensadoun, A., Bull, L. S., Burton, J. H., Gleeson, P. A., Han, I. K., Joo, Y. D., Johnson, D. E., McManus, W. R., Paladines, O. L., Stroud, J. W., Tyrrell, H. F., Van Niekerk, E. D. H., Wellington, G. H., and Wood, J. D. 1968. Present status of various methods of estimating body composition. Proc. 21st Annu. Recip. Meat Conf. July 1-3, 1968, Athens, Ga. pp. 82-114.



1968

- Reimann, E. M., Maxwell, C. V., Kowalczyk, T., Benevenga, N. J., Grummer, R. H., and Hoekstra, W. G. 1968. Effect of fineness of grind of corn on gastric lesions and contents of swine. *J. Anim. Sci.* 27:992-999.
- Reinhold, V. N., Dunne, F. T., Wriston, J. C., Schwarz, M., Sarda, L., and Hirs, C. H. W. 1968. The isolation of porcine ribonuclease, a glycoprotein from pancreatic juice. *J. Biol. Chem.* 243(24):6482-6494.
- Reutzel, L. F., and Sumption, L. J. 1968. Genetic and phenotypic relationships involving age at puberty and growth rate of gilts. *J. Anim. Sci.* 27:27-30. (ABA 36:2811).
- Rich, T. D., Turman, E. J., and Hillier, J. C. 1968. A comparison of the ovulation rate, fertilization rate and embryo survival of hand-mated and lot-mated gilts. *J. Anim. Sci.* 27:443-446. (ABA 36:3884).
- Richter, G., and Gehrke, E. 1968. Length conditions in the thoracolumbal vertebral column of the pig and their correlations with pork results. *Eng. Sum. (Ger.) Mon.H. Vet.Med.* 23(8):305-309.
- Rigby, J. P. 1968. Length of the uterine horn and fallopian tube in the sow. *Res. Vet. Sci.* 9:551-556.
- Rigor, E. M., Villareal, R. L., and Ilagan, H. P. 1968. Estrus induction in sows with diethylstilbestrol. *Proc. 6th Internatl. Cong. Reprod. & Artif. Insem.* July 22-26, 1968. *Inst. Natl. Recherche Agron. France.* p. 297. (ABA 37:719).
- Rittenbach, P., and Rommel, P. 1968. Extrauterine gravidity in swine. *Eng. Sum. (Ger.) FortPfl. Besam. Aufzucht Haust.* 4(2/3):165-167.
- Rittler, A. 1968. Ultrasonic measurements as an aid to estimating breeding value in the pig. 3. Estimation of lean and fat percentages by ultrasonic measurement of the live pig. *Eng. Sum. (Ger.) Z. Tierzucht. ZuchtBiol.* 85:78-89. (ABA 37:1689).
- Rittler, A. 1968. Ultrasonic measurements as an aid to estimating breeding value in the pig. 2. Further studies on the genetic basis of ultrasonic measurements on young boars. *Eng. Sum. (Ger.) Z. Tierzucht. ZuchtBiol.* 84:179-187. (ABA 36:2831).
- Robertson, A., Imlah, P., and Lang, B. G. 1968. Blood research unit. *PIDA Index Pig Res.* p. 37. Jan.
- Robinson, T. J. 1968. Synchronization of the oestrous cycle and fertility (sow). *Proc. 6th Internatl. Cong. Reprod. & Artif. Insem.* July 22-26, 1968. *Inst. Natl. Recherche Agron. France.* pp. 298-299.



1968

- Robison, O. W. 1968. Biomathematics and data processing in national breeding schemes. Proc. NATO Internatl. Summer Sch. Biomath. and Data Process. Anim. Expts., Elsinore, Denmark.
- Robison, O. W. 1968. Swine breeding research. 31st Annu. Rpt. and Rec. Proc. Conf. Collab., Reg. Swine Breed. Lab., July 8-9, Raleigh, N. C. pp. 95-96.
- Robison, O. W. 1968. The role of genetics in reproduction. Proc. 11th Natl. Pork Indus. Conf. Dec. 12-13, 1968, Raleigh, N. C.
- Roesel, O. F., and Neher, G. M. 1968. Experimental hypopituitarism in swine: Observations on clinical signs, growth, and weights of organs. Amer. J. Vet. Res. 29(6):1221-1227.
- Rook, J. A. F. 1968. Effect of plane of energy and protein nutrition on the yield and composition of milk. PIDA Index Pig Res. 1968. p. 42. Jan.
- Rook, J. A. F., and Spincer, J. 1968. Precursors of milk constituents in the lactating sow. PIDA Index Pig Res. 1968. p. 42. Jan.
- Rook, J. A. F., and Witter, R. C. 1968. The relationship in the sow between dietary fat and milk secretion. PIDA Index Pig Res. 1968. pp. 41-42. Jan.
- Rook, J. A. F., and Witter, R. C. 1968. Diet and milk secretion in the sow. Proc. Nutr. Soc. 27(1):71-76.
- Rosas, Hermel. 1968. Dietary calcium and zinc effects in unilaterally neutron-irradiated swine. Ph.D. Thesis, U. Tenn. Libr., Oak Ridge, Tenn.
- Roy, G. L., Boyland, W. J., and Seale, M. E. 1968. Estimates of genetic correlations among certain carcass and performance traits in swine. Canad. J. Anim. Sci. 48(1):1-6. (ABA 36:3854).
- Ruiz, M. E., Speer, V. C., Hays, V. W., and Switzer, W. P. 1968. Effect of feed intake and antibiotic on reproduction in gilts. J. Anim. Sci. 27:1602-1606. (ABA 37:2765).
- Ruland, Frederick Sloop. 1968. Weight of sows at parturition and at the end of lactation in two breeds of pigs. M.S. Thesis, Iowa State U. Libr., Ames.
- Rulcker, C. 1968. The influence of physical training and short-time physical stress on colour, fluid loss, pH, adenosine triphosphate and glycogen of the gracilis muscle in pigs. An experimental study. Acta Vet. Scand. 24:44 pp. (ABA 36:3816).



1968

- Rundell, J. W., and Vincent, C. K. 1968. In vitro culture of swine ova. (Abs.) J. Anim. Sci. 27:1196.
- Sage, J. M., Pond, W. G., Krook, L., O'Connor, J. R., and Walker, E. F. Jr. 1968. Effect of thyroidectomy on bone in pigs. (Abs.) J. Anim. Sci. 27:1156.
- Saison, R. 1968, A survey of polymorphism of cellular and serum blood groups in pigs. (Abs.) Proc. Gen. Soc. & West. Brch. Can. Soc. Anim. Prod. p. 19. (ABA 37:3153).
- Salmon-Legagneur, E. 1968. Prenatal development in the pig and some other multiparous animals. Growth & Development of Mammals. pp. 158-191.
- Sandison, A. T., and Anderson, L. J. 1968. Tumours of the endocrine glands in cattle, sheep and pigs found in a British abattoir survey. J. Compar. Path. & Ther. 78:435.
- Sasser, L. B., Argenzio, R. A., and Ward, G. M. 1968. Relationship of  $K^{40}$  to body composition of swine. (Abs.) J. Anim. Sci. 27:1123.
- Saunders, C. N., and Kinch, D. A. 1968. Thrombocytopenic purpura of pigs. J. Compar. Path. & Ther. 78:513-523.
- Schilling, E. 1968. Experimental embryonic death in the pig. Proc. 6th Internatl. Cong. Reprod. & Artif. Insem., 22-26 July, 1968, Paris. Resumes only. Publ. by Inst. Natl. de la Recherche Agronomique, France, p. 103.
- Schilling, E., and Radermacher, R. 1968. Postnatal ovogenesis in the pig ovary and the influence on it of gestagen treatment of the new-born piglet. Eng. Sum. (Ger.) Zent. Bl. Vet. Med. 15(1):17-40. (ABA 36:3886).
- Schmidt, G. R., and Briskey, E. J. 1968. Observations on the development of rigor mortis in porcine muscle under controlled environmental conditions. (Abs.) J. Anim. Sci. 27:1764.
- Schmidt, G. R., Cassens, R. G., and Briskey, E. J. 1968. Development of an isotonic-iso-metric rigorometer. J. Food Sci. 33(3):239-241.
- Schon, L., and Scheper, J. 1968. Investigations into pig breeding in the German Federal Republic. 3. Meat characteristics. Eng. Sum. (Ger.) Fleischwirtschaft 48(4):460-463.



1968

- Schon, L., and Scheper, J. 1968. Investigations into pig breeding in the German Federal Republic. 4. Relationships between various carcass measurements and quantitative carcass characteristics. Eng. Sum. (Ger.) Fleischwirtschaft 48(5):633-637.
- Schon, L., and Scheper, J. 1968. Investigations into pig breeding in the German Federal Republic. 5. Relationship between the size of the individual parts and their approximate tissue composition and the quantitative carcass characteristics. Eng. Sum. (Ger.) Fleischwirtschaft 48(6):814-818.
- Schroder, J., and Flock, D. 1968. Fattening performance and carcass value in the pig and its dependence on final fattening weight (90-150 kg.) Eng. Sum. (Ger.) Zucht.K. 40:353-365. (ABA 37:1649).
- Schuld, F. W., and Bowland, J. P. 1968. Dietary rapeseed meal for swine reproduction. Canad. J. Anim. Sci. 48(1):57-64. (ABA 36:3887).
- Schuld, F. W., and Bowland, J. P. 1968. Composition of colostrum and milk from sows receiving dietary rapeseed meal or soybean meal. Canad. J. Anim. Sci. 48(1):65-69.
- Seamark, R. F., Tate, M. E., Smeaton, T. C. 1968. Occurrence of scylloinositol and D-glycerol 1-(L-myoinositol 1-hydrogen phosphate) in the male reproductive tract. (boar). J. Biol. Chem. 243:2424-2428.
- Sedlakova, E., Dostal, J., and Matousek, J. 1968. Serum albumin in pig epididymis. Compar. Biochem. & Physiol. 26(1):143-148.
- Seebeck, R. M. 1968. Developmental studies of body composition. (Rev.) Anim. Breed. Abs. 36(2):167-181.
- Seibert, D. 1968. Non additive and additive genetic variance of birth weight, weaning weight and average daily gain in swine. M.S. Thesis, South. Ill. U. Libr., Carbondale, Ill.
- Seibert, D. W., Miller, H. W., and Goodman, B. L. 1968. Non-additive and additive genetic variance in swine. (Abs.) J. Anim. Sci. 27:1129.
- Senegacnik, J. 1968. The effect of various environmental factors on viability of semen of boars. Eng. Sum. (Ser.) Vet. Glasn. 22(5):441-445. (ABA 36:3904).



1968

- Senegacnik, J., and Bajt, G. 1968. Contribution to the study of fertilizing power of diluted boar semen. Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche Agron. France. p. 244. (ABA 37:752).
- Serdjuk, S. I. 1968. Boar sperm storage: medium and method. Proc. 6th. Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche Agron. France. p. 204. (ABA 37:753).
- Shafer, L. 1968. Plan time of farrowing with new chemical to aid estrus control. Wallace's Fmr. 93(21):52-53. Nov. 9.
- Sharon, J. 1968. What type of hog do consumers really want. Farmers Dig. 31(10):11-14. April.
- Shaw, E. G. 1968. Age related changes in serum micro and macro elements in the miniature swine. Diss. Abs. 28(10):3998B.
- Shaw, G. A., Baker, R. D., and McDonald, B. E. 1968. Induction and maintenance of pregnancy in prepubertal gilts. (Abs.) Proc. Gen. Soc. & West. Brch. Can. Soc. Anim. Prod. pp. 29-30. (ABA 37:3153).
- Shelby, C. E. 1968. A guide to swine breeding literature. Reg. Swine Breed. Lab., AHRD, ARS, USDA, Ames, Iowa. 228 pp.
- Shelby, C. E. 1968. Swine Improvement. I. During the period 1861-1949. Reg. Swine Breed. Lab. AHRD, ARS, USDA, Ames, Iowa. 160 pp. (ABA 37:608).
- .>
- Shelby, C. E. 1968. Swine Improvement. III. During the period 1960-1964. Reg. Swine Breed. Lab., AHRD, ARS, USDA, Ames, Iowa 224 pp.
- Shelby, D. R., and Anderson, R. H. 1968. Effect of A.I. and AIMAX on litter size and conception. (Abs.) J. Anim. Sci. 27:1759-1760.
- Shelby, D. R., and Singleton, W. L. 1968. Effects of boars on conception rate and litter size. (Abs.) J. Anim. Sci. 27:1789.
- Short, R. E. 1968. Studies on the mechanisms controlling ovarian activity. Diss. Abs. 28(11):4739B.
- Short, R. E., Peters, J. B., First, N. L., and Casida, L. E. 1968. Effect of unilateral ovariectomy at three stages of the estrous cycle on the activity of the remaining ovary and pituitary gland. J. Anim. Sci. 27:691-696.
- Shelby, C. E. 1968. Swine Improvement. II. During the period 1950-1959. Reg. Swine Breed. Lab., AHRD, ARS, USDA, Ames, Iowa 177 pp. (ABA 37:608)



1968

- Shuler, R. O., Pate, T. D., and Mandigo, R. W. 1968. Influence of confinement and floor structure on pork carcass characteristics. (Abs.) J. Anim. Sci. 27:1765.
- Sidor, V. 1968. Protein-bound iodine in blood serum and its relation to the histological structure of the thyroid gland and meat production in growing pigs. Eng. Sum. (Slov.) Pol'nohospodarstvo 14:869-879. (ABA 37:3847).
- Sidor, V. 1968. The formation of tissue and fats in black-spotted swine breed during the weight gain from 20 to 120 kg. Eng. Sum. (Cz.) Pol'nohospodarstvo 14(7):543-552. (ABA 37:3838).
- Sidor, V., and Paska, I. 1968. Contribution to the objective estimation and turning into money of slaughter pigs on the basis of subcutaneous fat formation. Eng. Sum. (Cz.) Pol'nohospodarstvo 14(2):131-138.
- Siers, David Gard. 1968. The relationship of plasma levels of growth hormone to meatiness and growth rate in swine. Ph.D. Thesis, Iowa State U. Libr., Ames. Diss. Abs. 29:1224B. (ABA 37:1650).
- Signoret, J. P., and Du Buisson, F. Du Mesnil. 1968. Factors influencing the results of artificial insemination of swine. Eng. Sum. (Ger.) FortPfl. Zuchthyg. Haust. Besam. 4(1):29-44.
- Signoret, J. P., and Du Mesnil Du Buisson, F. 1968. Influence of the housing conditions of boars on the farrowing rate after artificial insemination. Proc. 6th Internatl. Cong. Reprod. Artif. Insem. Paris, 1968. Resumes:74. (ABA 37:722).
- Siler, R., Pavlik, J., and Fiedler, J. 1968. Variations in the litter size of sows of Cornwall swine breed bred in Bohemia. Eng. Sum. (Cz.) Zivoc. Vyr. 41(3):181-188. (ABA 36:3818).
- Siler, R., Pavlik, J., and Fiedler, J. 1968. Prediction of litter size in sows. Eng. Sum. (Cz.) Zivoc. Vyr. 13:551-560. (ABA 37:1708).
- Simovic, B., and Milojic, M. 1968. Effect of boars on the fertility of their daughters. Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche Agron. France. p. 255. (ABA 37:663).
- Simunic, B., and Abram, K. 1968. Artificial insemination of swine in Yugoslavia. Eng. Sum. (Ser.) Vet. Glasn. 22(5):429-433. (ABA 36:3906).



1968

Simunic, B., and Hajsig, M. 1968. Findings of yeasts in boar semen. Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche Agron, France. p. 346.

Sink, J. D., Beery, K. E., and Kline, R. C. 1968. Studies on the chemical transformation in adipose tissue post-mortem. Proc. Pa. Acad. Sci. 42:70.

Sink, J. D., and Jester, W. A. 1968. Studies of the gamma spectrum of neutron irradiated adipose tissue (porcine). (Abs.) J. Anim. Sci. 27:1511-1512.

Skelley, G. C., Handlin, D. L., and Leslie, E. E. 1968. Iron injection and ham acceptability. J. Anim. Sci. 27:1261-1265.

Skinner, J. D., Kemm, E. H., and Pieterse, P. J. S. 1968. Preliminary note on the effect of androstenedione on growth rate and reproductive development in piglets. Proc. S. Afr. Soc. Anim. Prod. 7:157. (ABA 37:3849).

Skottke, M. 1968. High frequency sound in the quality control of live pigs. Fmg. (Zambia) 41(1):10.

Smidt, D. 1968. Endogenous and exogenous environmental influences on the prenatal development in mammals. (incl. pig). Eng. Sum. (Ger.) Geburtsh. Gynak. 168:125-142.

Smidt, D., Harms, E., Perings, E., Hunstein, W., and Konig, A. 1968. Methodical study of ovary transplantation in the miniature pig. Proc. 6th Internatl. Cong. Reprod. Artif. Insem. 22-26 July, 1968, Paris. Inst. Natl. de la Recherche Agron. France. p. 48.

Smidt, D., Jochle, W., and Thume, O. 1968. Application of androgen-estrogen preparations in synchronizing the sow estrus. Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. de la Recherche Agron. France. p. 300. (ABA 37:723).

Smidt, D., and Holtz, W. 1968. Methods of ovulation detection in the sow. I. II. Eng. Sum. (Ger.) Deut. Tierarztl. Wchn.Schr. 75:217-220, 246-250.

Smirnova, Yu. G. 1968. Some biological peculiarities of newborn piglets of the Large White breed. Eng. Sum. (Russ.) Moskov. Obshch. Ispytatelei Priorody. Tr. Otdel Biol. 29:161-168.

Smisek, V., Buchta, S., and Prazak, C. 1968. Some relationships between meat characters in Czechoslovakian Improved White pigs. Eng. Sum. (Cz.) Acta U. Agr. Fac. Agron, Brno, 16:469-472. (ABA 37:3839).



1968

- Smisek, V., Buchta, S., and Dufek, J. 1968. Determination of relation between birth weights of piglets in a litter and number of days to 20 and 100 kg of live weight. Eng. Sum. (Cz.) Zivoc. Vyr. 13: 575-582. (ABA 37:1711).
- Smith, C., Jensen, E. L., Baker, L. N., and Cox, D. F. 1968. Quantitative studies on blood group and serum protein systems in pigs. I. Segregation ratios and gene frequencies. J. Anim. Sci. 27: 848-855. (ABA 37:679).
- Smith, D. H. 1968. Testing programmes and selection index. Vet. Rec. 83(24):629.
- Smith, D. 1968. Accreditation may scrap pedigree link. Pig Fmg. 16(12):25, 27. Dec.
- Smith, W. C., Barkes, J. M., and Tonks, H. M. 1968. Crossbreeding studies with Hampshire boars. (Abs.) Anim. Prod. 10(2):231-248.
- Smith, W. C., and Barkes, J. N. 1968. The influence of breed and sex on relationships between specific gravity and the carcass composition of pigs of bacon weights. PIDA Index Pig Res. pp. 55-56. Jan.
- Snell, J. G. 1968. A comparative cost analysis of alternative marketing systems for slaughter hogs in Michigan. Diss. Abs. A 28(12, pt. 1): 4791A.
- Soni, J. L. 1968. Aplasticity of vulvae with reference to normal breeding and development of hermaphroditism in Middle White Yorkshire pigs. Indian Vet. J. 45(6):528-529. (ABA 37:680).
- Sovljanski, B., and Milosavljevic, S. 1968. The effect of age of gilts at the first parturition on the number and weight of alive and the percentage of stillborn baby pigs. Eng. Sum. (Ser.) Vet. Glasn. 22(5):469-474. (ABA 36:3890).
- Spruill, D., Hays, V. W., and Cromwell, G. L. 1968. Effect of protein source and levels and oral iron for the sow on reproductive performance. Ky. Anim. Sci. Res. Rpt. 176:60-61. (ABA 37:3895).
- Squiers, C. D., Tucker, H. F., and Ruffin, B. G. 1968. Retarded growth syndrome in pigs as related to breeding and other factors. (Abs.) J. Anim. Sci. 27:1129.
- Srivastava, P. K. 1968. Leukocyte cultures from the peripheral blood of cattle and swine. Diss. Abs. 28B, 3043-B.



1968

- Srivastava, P. K., and Lasley, J. F. 1968. Leucocyte culture and chromosome preparations from pig blood. *Stain Technol.* 43(4): 187-190.
- Stabenfeldt, G. H., Akinds, E. L., Holt, J. A., McDonald, L. E., and Morrisette, M. C. 1968. Comparative levels of progesterone in the peripheral blood of the cow, gilt and ewe during the estrous cycle. *Fed. Proc.* 27:689.
- Standal, N. 1968. Studies on breeding and selection schemes in pigs. I. Selection on performance of purebred versus crossbred progeny. *Acta Agr. Scand* 18:222-232. (ABA 37:2711).
- Standal, N., and Homb, T. 1968. Effect of performance of parents, age at weaning and plane of nutrition just after weaning on production in fattening pigs. *Eng. Sum. (Nor.) Meld. Norg. Landbr. Hogsk.* 47(3).pp. 8.
- Stankovic, M., and Anastasijevic, V. 1968. Effect of body development of piglets at early weaning on their further growth and the appearance of post-partum oestrus in the sows. *Eng. Sum. (Cro.) Stocarstvo* 22:367-374. (ABA 37:2723).
- Stant, E. G. Jr., Martin, T. G., Judge, M. D., and Harrington, R. B. 1968. Physical separation and chemical analysis of the porcine carcass at 23, 46, 68 and 91 kilograms liveweight. *J. Anim. Sci.* 27:636-644. (ABA 36:3820).
- Staun, H. 1968. Diameter and number of muscle fibres and their relation to meatiness and meat quality in Danish Landrace pigs. 366 Beret. Forsogslab. (Copenhagen).
- Steinbach, J. 1968. Breeding performance of the sow herd of the University of Ibadan. *Farmstock, Nigeria*, May.
- Steinbach, J. 1968. Effects of ambient temperatures during the periods of follicular development, ovulation and implantation on litter size in swine. *Proc. 6th Internatl. Cong. Reprod. Artif. Insem.* 22-26 July, 1968, Paris. *Inst. Natl. de la Recherche Agron. France.* p. 76. (ABA 37:724).
- Steinbach, J., and Smidt, D. 1968. Effects of progesterone and chlormadinone on histological characteristics of the genital tract of gilts. *Proc. 6th Internatl. Cong. Reprod. & Artif. Insem.* July 22-26, 1968. *Inst. Natl. Recherche Agron. France.* p. 301.
- Stevermer, E. J. 1968. Swine Outlook - Future to stress gain, efficiency and quality. *Iowa Farm Sci.* 22(7):155-156.



- Stockklausner, F. 1968. Breakthrough in swine insemination. *Canad. Swine* 30(4):7.
- Stormshak, F., Leverage, W. E. Jr., Kelley, H. E., and Gerrits, R. J. 1968. Pituitary and ovarian characteristics of gilts fed AIMAX. (Abs.) *J. Anim. Sci.* 27:1789.
- Strachan, D. N., Walker, E. F. Jr., Pond, W. G., O'Connor, J. R., Dunn, J. A., and Barnes, R. H. 1968. Reproduction in swine fed a protein-free diet at various stages of gestation. (Abs.) *J. Anim. Sci.* 27:1157-1158.
- Strafuss, A. C., Dommert, A. R., Tumbleson, M. E., and Middleton, C. C. 1968. Cutaneous melanoma in miniature swine. *Lab. Anim. Care* 18(2, pt. 1):165-169.
- Stumpf, J. 1968. Influence of vitamin A on the production of piglets. (fertility). *Eng. Sum. (Cz.) Veterinaria SPOFA* 10(2):127-132.
- Suarez, C. A., Guerrero, A. A., Musil, G., and Hulet, W. H. 1968. Renal function and nephron structure in the miniature pig. *Amer. J. Vet. Res.* 29(5):995-1007.
- Sugahara, M., Baker, D. H., Harmon, B. G., and Jensen, A. H. 1968. Effect of dietary crude protein on carcass development in swine. (Abs.) *J. Anim. Sci.* 27:1780.
- Svajgr, A. J., Lucas, L. E., Mandigo, R. W., and Peo, E. R. Jr. 1968. Effect of floor structure in confinement and drylot space allotment on growth, carcass and bone development in G-F swine. (Abs.) *J. Anim. Sci.* 27:1136-1137.
- Svechin, Yu. K. 1968. Response of swine with different constitutional characteristics to environmental raising conditions. *Eng. Sum. (Russ.) Vest. Sel.Hoz. Nauki (Moscow)* 2:93-97.
- Sviben, M., and Salehar, A. 1968. Criteria for selecting primiparous Swedish Landrace sows for fertility and viability in the Ihan herd. *Eng. Sum. (Ser.) Stocarstvo* 22:317-326, 329, 330. (ABA\*37:1665).
- Swanson, L. V., Hafs, H. D., and Peterson, D. E. 1968. Sperm distribution after unilateral vasoligation. (Abs.) *J. Anim. Sci.* 27:1197-1198.
- Swarbrick, O. 1968. Porcine agalactia syndrome. Clinical and histological observations. *Vet. Rec.* 82:241-252.



1968

- Swierenga, S. H., and Basrur, P. K. 1968. DNA synthesis in normal and neoplastic lymphocytes of domestic animals. *Cornell Vet.* 58, 292.
- Swierstra, E. E. 1968. Comparison of spermatozoa production and spermatozoa output of Yorkshire and Lacombe boars. *J. Reprod. & Fertil.* 17:459-469.
- Swierstra, E. E. 1968. Cytology and duration of the cycle of the seminiferous epithelium of the boar; duration of spermatozoan transit through the epididymis. *Anat. Rec.* 161(2):171-179.
- Swierstra, E. E. 1968. A comparison of spermatozoa production and spermatozoa output of Yorkshire and Lacombe boars. *J. Reprod. & Fertil.* 17:459-469. (ABA 37;1733).
- Swierstra, E. E., and Rahnefeld, G. W. 1968. Growth, carcass measurements and sexual development of partially and completely castrated pigs. *Canad. J. Anim. Sci.* 48:353-359. (ABA 37:2712).
- Swierstra, E. E., and Rahnefeld, G. W. 1968. Growth, carcass measurements and sexual development of partially and completely castrated pigs. (Abs.) *Proc. Gen. Soc. & West. Brch. Can. Soc. Anim. Prod.* p. 70.
- Sybesma, W., and Logrestijn, J. G. 1968. Experiments in improving meat quality in pigs by ante and post mortem injections of oxygen. *Eng. Sum. (Ger.) Fleischwirtschaft* 48(7):926-929.
- Sybesma, W., and Zuidam, L. 1968. Blood enzymes and meat quality. *Rpt. of the 14th Europ. Meat Res. Conf., Brno, Cz. AMSA Chicago.* p. 17.
- Szumowski, P. 1968. Composition of sow luminal fluids and on their importance for the survival of spermatozoa. *Proc. 6th Internatl. Cong. Reprod. Artif. Insem.* 22-26 July 1968, Paris. *Inst. Natl. de la Recherche Agron, France.* p. 18.
- Takagi, I. 1968. Effect of thyroid-stimulating hormone, estrogens and other thyro-tropic substances in vitro on Na<sup>+</sup>-activated ATP-ase of pig thyroid gland. *Jap. J. Physiol.* 18:723-730.
- Takahashi, S., and Furuya, S. 1968. Influence of carbohydrate sources in swine rations on the quality of carcass fat. *Eng. Sum. (Jap.) Natl. Inst. Anim. Indus. B.* 16:45-49.
- Takahashi, S., Hirakata, Y., and Morimoto, H. 1968. Effect of adding lysine and methionine to low protein diets for pigs. *Eng. Sum. (Jap.) Natl. Inst. Anim. Indus. B.* 16:31-36.



1968

- Takahashi, S., Ikeda, T., and Morimoto, H. 1968. The yield and composition of edible portion in dressed carcass of young pigs. Eng. Sum. (Jap.) B. Natl. Inst. Anim. Indus. 16:25-30. Chiba City. (ABA 36:3821).
- Takahashi, S., and Furuya, S. 1968. Influence of carbohydrate sources in swine rations on the quality of carcass fat. Eng. Sum. (Jap.) B. Natl. Inst. Anim. Indus. 16:45-49. Chiba City.
- Taranov, M. T., Silaev, M. P., and Anisimov, B. N. 1968. Effect of the pre-slaughter adrenalin stress on the rate of oxidation processes upon pork storage. Eng. Sum. (Russ.) Prikl. Biokhim. Mikrobiol. 4(5):543-548.
- Tarrant, P. J. B., and McLoughlin, J. V. 1968. Anaerobic glycolysis in muscle taken immediately post-mortem and from live pigs under anaesthesia. Rpt. 14th Europ. Meat Res. Conf., Brno, Cz. AMSA p. 18.
- Tauber, W. 1968. Use in processed meat products. The Pork Industry: Problems and Progress. Iowa State U., Ames. pp. 47-48.
- Taylor, C. S. St. 1968. Time taken to mature in relation to mature weights for sexes, strains and species of domesticated mammals and birds. Anim. Prod. 10:157.
- Taylor, C. S. St., and Fitzhugh, H. A. Jr. 1968. Genetic relations among maturing rate, growth rate and feed efficiency. (Abs.) J. Anim. Sci. 27:286.
- Teague, H. S., Roller, W. L., and Grifo, A. P. Jr. 1968. Influence of high temperature and humidity on the reproductive performance of swine. J. Anim. Sci. 27:408-411. (ABA 36:3891).
- Terqui, M., Rombauts, P., and Fevre, J. 1968. Comparative faecal and urinary excretion of oestrogens in the ewe and sow. Eng. Sum. (Fr.) Ann. Biol. Anim. Biochim. Biophys. 8(3):339-348.
- Thimonier, J., Mauleon, P., and DuMesnil DuBuisson, F. 1968. Action of a progestagen administered vaginally on the postweaning estrus and fertility of the sow. Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche Agron, France. p. 302. (ABA 37:725).
- Thomas, H. R., Meacham, T. N., and Kornegay, E. T. 1968. Influence of weaning age on growth and development of the baby pig. Va. Agr. Expt. Sta. Res. Rpt. 126:96-97.



1968

- Thomas, Norman William. 1968. Physiological paramaters and skeletal muscle properties of stress-susceptible pigs reared in controlled environments. Ph.D. Thesis, Purdue U. Libr., Lafayette.
- Thomas, N. W., and Judge, M. D. 1968. Alteration of porcine skeletal muscle myoglobin by the environment. (Abs.) J. Anim. Sci. 27:1148-1149.
- Thomas, N. W., and Judge, M. D. 1968. Environmental influences on physiological adjustments in stress susceptible pigs and related properties of muscle. (Abs.) J. Anim. Sci. 27:1149.
- Thornton, J. W., Alsmeyer, R. H., and Davey, R. J. 1968. Genetic, diet and pig age effects on pork tenderness and palatability. J. Anim. Sci. 27:1229-1232. (ABA 37:1692).
- Thrasher, G. W., Shively, J. E., Askelson, C. E., Babcock, W. E., and Cahquest, R. R. 1968. Effects of carbadox on performance and carcass traits of swine. (Abs.) J. Anim. Sci. 27:1137.
- Thurley, D. C. 1968. The pale muscle problem in pigs. State Vet. J. 23(68):152-155.
- Tihonov, V. 1968. Immunological incompatibility as a cause of fertility decrease in animal crossbreeding (pig). Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche Agron, France. p. 133. (ABA 37:681).
- Tihonov, V. N. 1968. Immunogenetical study of animal reproduction problems in inbreeding and crossbreeding (pig). Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche Agron, France. p. 134. (ABA 37:682).
- Tillmann, H., and Von Sandersleben, J. 1968. Infertility caused by inhibition of spermatogenesis in bull and boar. Eng. Sum. (Ger.) Zuchthyg. Fort.Pfl. Stor. Besam. Haust. 3:83-88.
- Timonera, M. P., Fajardo, R. C., and Rigor, E. M. 1968. The relationship of age and weight at puberty with growth rate of gilts. Phil. Agr. 51:211-217. (ABA 37:1714).
- Todd, A. C. E., and Daniels, E. L. 1968. The influence of housing on the performance of growing pigs in a subtropical environment. Proc. Aust. Soc. Anim. Prod. 1968, 7:285-288. (ABA 37:2724).
- Todd, G. C., Nelson, L. W., and Migaki, G. 1968. Multiple heterotopic testicular tissue in the pig. A report of seven cases. Cornell Vet. 58(4):614-619.
- Todd, A. C. E., and Sewell, J. O. 1968. Effect of nicotine sulphate on the performance and carcass quality of growing pigs. Queensland J. Agr. Sci. 25(3):145-148.



1968

- Todd, P. M. 1968. An electron microscope study of the distribution of connective tissue of muscle and its relation to the sarcolemma. Ph.D. Thesis, U. Leeds.
- Topel, D. G. 1968. Bibliography of porcine composition research. I & II. Iowa State U., Ames.
- Topel, D. G. 1968. Research problems and potentials of carcass composition studies with swine. Proc. 11th Natl. Pork Indus. Conf. Dec. 12-13, 1968, Raleigh, N. C.
- Topel, D. G. 1968. Endocrine influence on the micro-circulatory system. Proc. 21st Annu. Recip. Meat Conf. July 1-3, 1968. Athens, Ga. pp. 194-218.
- Topel, D. G., Bicknell, E. J., Preston, K. S., Christian, L. L., and Matsushima, C. Y. 1968. Porcine stress syndrome. Mod. Vet. Pract. 49(5):40-41, 59-60.
- Townsend, W. E. 1968. Differential thermal analysis of fats in sausage formulation. Proc. 21st Annu. Recip. Meat Conf. July 1-3, 1968, Athens, Ga. pp. 378-390.
- Trakulchang, S., Fajardo, R. C., and Rigor, E. M. 1968. The performance of Philippine pigs and Philippine pig x Landrace crosses (F<sub>1</sub>). I. Growth and food utilization. II. Carcass evaluation. Phil. Agr. 51:218-226, 227-230. (ABA 37:1652).
- Triebler, G. 1968. The hybrid pig, a definite goal in pig breeding. Eng. Sum. (Ger.) Mon.H. Vet. Med. 23(19):721-727.
- Tumbleson, M. E., Dommert, A. R., and Middleton, C. C. 1968. Techniques for handling miniature swine for laboratory procedures. Lab. Anim. Care 18(5):584-587.
- Tumbleson, M. E., Dommert, A. R., Wescott, R. B., and Coffman, W. J. 1968. Effect of administration route upon Iron-59 retention in miniature swine as measured in a 2-pi liquid scintillation whole body counter. J. Anim. Sci. 27:83-87.
- Tumbleson, M. E., Wood, M. G., and Kalish, P. P. 1968. Serum biochemic parameters in young swine. (Abs.) J. Anim. Sci. 27:1780.
- Twedt, D. 1968. General acceptance of pork. The Pork Industry: Problems and Progress, Iowa State U., Ames. pp. 3-7.
- Ulberg, L. C. 1968. Embryo-uterine interaction. 31st Annu. Rpt. & Rec. Proc. Conf. of Collab, Reg. Swine Breed. Lab. July 8-9, Raleigh, N. C. pp. 89.



1968

- Underdahl, N. R., Coupe, R. E., Ferguson, D. L., Peo, E. R., and Twiehaus, M. J. 1968. Nebraska's specific-pathogen-free (SPF) swine program. U. Nebr. Agr. Expt. Sta. B. 499, 15 pp.
- Usborne, W. R., Kemp, J. D., and Moody, W. G. 1968. Effect of live-weight on quality, proximate composition, certain protein components and free amino acids of porcine muscle. J. Anim. Sci. 27:584-589. (ABA 36:3822).
- Usborne, W. R., Kemp, J. D., and Moody, W. G. 1968. Relation of protein components and free amino acids to pork quality. J. Anim. Sci. 27:590-595.
- Vaiman, M., Dubiez, R., Colson, X., and Nizza, P. 1968. Autografts of bone marrow in swine irradiated with lethal doses. Eng. Sum.(Fr.) Internatl. J. Radiat. Biol. 14(3):207-224.
- Vaiman, M., Dubiez, R., Colson, X., and Nizza, P. 1968. Hematological data of the pig used in radiobiology; blood cytology. Eng. Sum. (Fr.) Rev. Med. Vet. 31(2):129-138.
- Vandeplassche, M., Vandavelde, A., Delanote, M., and Ghekiere, P. 1968. Double parturition, superfoetation and delayed implantation in the sow. Eng. Sum. (Du.) Tijdschr. Diergeneesk. 93:1220-1236. (ABA 37:726).
- Van Der Horst, C. J. G. 1968. Occurrence of phenylpyruvic acid and other keto acids in boar semen. Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche. Agron, France. p. 227.
- Van Der Horst, C. J. G. 1968. Preliminary investigation into the occurrence of steroids in ovaries of pigs at 3 stages of pregnancy. Eng. Sum. (Du.) Tijdschr. Diergeneesk. 93:1515-1529.
- Vander Kolk, G. 1968. Retailer's view on fresh products. The Pork Industry:Problems and Progress, Iowa State U. Ames. pp. 12-16.
- Van Dieten, S. W. J. 1968. Field trial on synchronisation of oestrus in gilts by administration of "Aimax". Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche Agron. France. p. 269. (ABA 37:727).
- Van Duijn, C. Jr. 1968. Determination of sperm density by means of ultra-violet absorptiometry. (boar). Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche Agron, France.



1968

- Van Putten, G. 1968. An investigation into tailbiting in fattening pigs. Eng. Sum. Versl. Landbouwk. Onderz. (Wageningen). #706. (ABA 36:3797).
- Vapa, M., Tarasenko, B., Sijacki, N., and Stojanovic, Z. 1968. The detection in vivo of ova in swine. Eng. Sum. (Ser.) Veterinaria (Sarajevo) 17(1):49-55. (ABA 36:3892)
- Varadin, M., and Marjanov, M. 1968. Attempt to synchronize estrus in sows by applying progesterone and gonadotropic preparations. Proc. 6th Internatl. Cong. Reprod. & Artif. Insem. July 22-26, 1968. Inst. Natl. Recherche Agron. France. p. 303. (ABA 37:728).
- Varo, M. 1968. On the progeny-testing of boars in "field conditions". Maataloust. Aikakausk. 40:109-113. (ABA 37:1666).
- Vegni Talluri, M., and Guiggiani, V. 1968. Action of beryllium ions on primary cultures of swine cells. Caryologia 20(4):355-367.
- Vermedahl, L. D. 1968. Effects of stunting pigs in utero or during the neonatal period on subsequent development and on carcass characteristics. Diss. Abs. 29:1887-1888B.
- Vermedahl, L. D., Meade, P. J., Hanke, H. E., and Rust, J. W. 1968. Gestation and lactation feeding levels for gilts. I. Effects on reproduction and lactation performance. (Abs.) J. Anim. Sci. 27:1158-1159.
- Vermedahl, L. D., Meade, R. J., Rust, J. W., and Hanke, H. E. 1968. Gestation and lactation feeding levels for gilts. II. Performance of offspring subsequent to weaning and carcass characteristics. (Abs.) J. Anim. Sci. 27:1158.
- Veum, T. L., Pond, W. G., and Walker, E. F. Jr. 1968. Some effects of varied frequency of feeding on growing swine. Cornell Feed Serv. 63:5. Febr.
- Villareal, R. L., Fajardo, R. C., and Rigor, E. M. 1968. The effect of diethylstilbestrol (DES) on sows after weaning. Phil. Agr. 51:181-184. (ABA 37:1715).
- Vladimirskaia, E. M., and Harcenko, P. A. 1968. The separation of the spermatozoa of a boar by means of acid-temperature-induced anabiosis and the sex-ratio in the progeny of this boar. Eng. Sum. (Russ.) Genetika 4(3):116-125. (ABA 36:3893).
- Vognarova, I., and Dvorak, Z. 1968. Evaluation of meat with regard to the nutritive value of proteins. Rpt. 14th Europ. Meat Res. Conf., Brno, Cz. AMSA, Chicago. p. 20.



- Vogt, D. W. 1968. Sex chromosome mosaicism in a swine intersex. J. Hered. 59(3):166-167.
- Vohradsky, F. 1968. Causes of the death of pigs during transport and after placing in pens in the Prague slaughterhouses. Eng. Sum. (Ger.) Fleischwirtschaft 48(3):308-311.
- Vrchlabsky, J. 1968. The losses in live weight, tissue shrinkage and carcass yields of swine for slaughtering caused by transportation. Eng. Sum. (Cz.) Zivoc. Vyr. 41(1):39-48.
- Vrchlabsky, J. 1968. The influence of lorry transport on certain properties of the meat of pigs. Eng. Sum. (Cz.) Vet. Med. (Praha) 41(2):127-136.
- Waddill, D. G., Chaney, C. H., and Dutt, R. H. 1968. Ovulation rate in gilts after short-time exposure to continuous light. J. Reprod. & Fertil. 15:123-125. (ABA 36:2850).
- Walker, E. F. Jr., Pond, W. G., Strachan, D. N., O'Connor, J. R., Dunn, J. A., and Barnes, R. H. 1968. Reproduction in swine fed a protein diet at various stages of gestation. Cornell U. Swine Div. Mimeo Ser. No. 68-7.
- Walker, N. 1968. The manipulation of growth of the meat pig. North Irel. Agr. Res. Inst. Annu. Rpt. 1967-68, 34.
- Walker, N. 1968. How often to feed bacon pigs. Agr. North Irel. 43: 93-95.
- Walker, N., Holme, D. W., and Forbes, T. J. 1968. The effect of rate of gain during the growing and finishing periods on the feed efficiency and carcass composition of the pig. I. Rate of gain during the growing period from 18 to 57 kg live weight. J. Agr. Sci. 71: 311-318. (ABA 37:1655).
- Walker, N., Holme, D. W., and Forbes, T. J. 1968. The effect of rate of gain during the growing and finishing periods on the feed efficiency and carcass composition of the pig. II. Contrasting patterns of growth produced by different rates of gain from 20 to 55 kg and 55 to 87 kg live weight. J. Agr. Sci. 71:319-326. (ABA 37:1655).
- Walker-Love, J., Laird, R., and Forsyth, R. J. 1968. The new pig breeding unit at Auchincruive. Scot. Agr. 47(2):51-54.
- Walkowski, L. 1968. Sterility and subfertility in boars of the Large White Breed in the District of Bydgoszcz. Eng. Sum. (Pol.) Polsk. Arch. Weter. 11(1):171-184.



1968

- Wallace, H. D. 1968. Nutritional and management effects on muscle characteristics and quality. The Pork Industry: Problems and Progress, Iowa State U., Ames. pp. 77-86.
- Wallace, H. D. 1968. Effects of protein level on performance, costs and carcass merit of growing-finishing pigs. Proc. 11th Natl. Pork Indus. Conf. Dec. 12-13, 1968. Raleigh, N. C.
- Walsh, W. 1968. Pig A.I. in Ireland. World Rev. Anim. Prod. 4:82-83.
- Walstra, P., and Kroeske, D. 1968. Effect of castration on meat production in male pigs. World Rev. Anim. Prod. 4:59-64.
- Waltz, F. A., Foley, C. W., Herschler, R. C., Tiffany, L. W., and Liska, B. J. 1968. Bacteriological studies of boar semen. J. Anim. Sci. 27:1357-1362. (ABA 37:1736).
- Ward, A. G., Houston, T. W., and Reed, R. 1968. Studies in pork quality. PIDA Index Pig Res. 1968. p. 43. Jan.
- Ward, J. 1968. Index of scientific and economic studies of particular significance to the pig industry of the United Kingdom, Part VII. U. Aberdeen, Dept. of Agr. Misc. P. No. 8.
- Warnecke, M. O. 1968. Serological techniques -- Identification of species, organ and comminuted meats. Proc. 21st Annu. Recip. Meat Conf. July 1-3, 1968. Athens, Ga. pp. 391-405.
- Warnecke, M. O., and Saffle, R. L. 1968. Serological identification of animal proteins. 1. Mode of injection and protein extracts for antibody production. J. Food Sci. 33:131.
- Wass, D. F. 1968. Influence of 21- and 63-day weights on development of growing swine and carcass characteristics. Ph.D. Thesis, U. Minnesota Libr., St. Paul.
- Wass, D. F., Meade, R. J., and Comstock, R. E. 1968. Influence of 21- and 63-day weights on development of growing swine and carcass characteristics. (Abs.) J. Anim. Sci. 27:1781.
- Wasserman, A. E., and Talley, F. 1968. Organoleptic identification of roasted beef, veal, lamb and pork as affected by fat. J. Food Sci. 33(2):219-223.
- Webster, A. J. F., and Hicks, A. M. 1968. Respiration apparatus for the determination of the energy expenditure of livestock in cold environments. Canad. J. Anim. Sci. 48:89.



1968

- Weiss, G. M., Topel, D. G., Hazel, L. N., Christian, L. L., Ewan, R. C., Rust, R. E. 1968. Growth comparison of a muscular and fat strain of pigs. (Abs.) J. Anim. Sci. 27:1765.
- Welch, R. A. S. 1968. Ruakura looks at controlled pig breeding. New Zeal. J. Agr. 117(5):96-97.
- Wendler, G. 1968. Studies on the early weaning of piglets. Eng. Sum. (Ger.) Jahrb. Tierernahr. Futterungs Beratung 6:193-207.
- Wensing, C. J. G. 1968. Testicular descent in some domestic mammals. 1. Anatomical aspect of testicular descent (pig). Proc. K. Ned. Akad. Wet. 71(4):423-434.
- Werhahn, E. 1968. Investigations on the suitability of various ultrasonic measuring methods for estimating lean and fat percentages of pig carcasses. Eng. Sum. (Ger.) Z. Tierzucht. ZuchtBiol. 85:135-142. (ABA 37:1656).
- White, J. 1968. Developments in pig breeding. Roy. Assoc. Brit. Dairy Fmrs. J. 72:18-23. (ABA 37:3803).
- Whitworth, V. M. 1968. The effect of pre-slaughter variables on the post mortem behaviour of pork muscles. Ph.D. Thesis, U. Leeds.
- Widdowson, E. M. 1968. Effects of prematurity and dysmaturity in animals. In Nutricia Symposium, Aspects of Prematurity and Dysmaturity. H. E. Stenfert Kroese (Lieden) p. 127.
- Widdowson, E. M. 1968. The effect of growth retardation on postnatal development. In Growth and Development of Mammals edited by Lodge, G. A., and Lamming, G. E. Proc. 14th Easter Sch. Agr. Sci., U. Nottingham, 1967, p. 224.
- Widdowson, R. W. 1968. Fundamentals of Better Breeding. B.O.C.M. Pig Inf. B.
- Williams, P. J. 1968. Recent changes in the standards for pork carcasses and slaughter hogs. Proc. 21st Annu. Recip. Meat Conf. July 1-3, 1968, Athens, Ga. pp. 299-304.
- Wilson, B. R. 1968. Relationships between the weights of six individual hindquarter muscles and total muscle in pigs. Proc. Austral. Soc. Anim. Prod. 7:323-326. (ABA 37:2716).
- Wilson, B. R. 1968. Performance and carcase characteristics of pigs grown along three growth curves to bacon weight. Austral. J. Expt. Agr. & Anim. Husb. 8(31):162-167.



1968

- Wilson, B. R., and Williams, R. J. 1968. Bilateral symmetry of pig muscle weights. Austral. J. Expt. Agr. & Anim. Husb. 8(34):510-511. (ABA 37:1657).
- Winzenried, H. U. 1968. The synchronisation of the sexual cycle in small farm animals. Eng. Sum. (Ger.) Berlin. Munch. Tierarztl. Wchn.Schr. 81(1):1-8.
- Wipf, V. K., Mullins, A. M., Passbach, F. L., and Paul, B. A. 1968. Acid mucopolysaccharides of selected porcine muscles. (Abs.) J. Anim. Sci. 27:1149.
- Wisner-Pedersen, J. 1968. Modern production practices and their influence on stress conditions. The Pork Industry: Problems and Progress, Iowa State U., Ames. pp. 163-176.
- Withrow, Gene. 1968. Metabolism of selenium-75 in the erythrocyte of growing sheep and swine. M.S. Thesis, U. Tenn. Libr., Knoxville.
- Witters, W. L., and Foley, C. W. 1968. Possible phosphogluconate pathway in washed boar sperm. (Abs.) J. Anim. Sci. 27:1790.
- Witters, W. L., Foley, C. W., Jones, P. H., and Erb, R. E. 1968. Fatty acids in whole washed boar sperm. (Abs.) J. Anim. Sci. 27:1199.
- Wong, W. C., Boylan, W. J., and Stothers, S. C. 1968. Effects of dietary protein level and sex on swine performance and carcass traits. Canad. J. Anim. Sci. 48(3):383-388. (ABA 37:2717).
- Wood, F. J. 1968. On the farm testing program for swine. Iowa Vet. 39(5):6-8.
- Wood, M. G., Tumbleson, M. E., and Dommert, A. R. 1968. Porcine serum protein estimation from refractive index. Amer. J. Vet. Clin. Path. 2:1.
- Wright, D. 1968. Preliminary observations on the muscle quality of pigs from the Northern Ireland Pig Testing Station. (Abs. 57) Proc. C.I.C.R.A. Conf., Dublin, 1967.
- Wrobel, K. H. 1968. Morphological studies on the active secretory epithelium of the porcine seminal vesicle. (Abs.) Anat. Rec. 160:454.
- Wrobel, K. H., and Kuhnel, W. 1968. Enzyme histochemistry of the mammalian testis. 1. Oxidoreductase in goat and pig. Eng. Sum. (Ger.) Berlin Munch. Tierarztl. Wchn. Schr. 81:86-90.



1968

- Wrobel, K. H., and Kuhnel, W. 1968. Enzyme histochemistry of the mammalian testicle. 2. Hydrolases in the testicles of goats and pigs. Eng. Sum. (Ger.) Berlin Munch. Tierarztl. Wchn.Schr. 81: 297-301.
- Wyllie, D., Speer, V. C., Ewan, R. C., and Hays, V. W., 1968. Starter protein levels for pigs. I. Effect on subsequent performance and carcass measurement. (Abs.) J. Anim. Sci. 27:1782.
- Wyllie, D., Speer, V. C., Ewan, R. C., and Hays, V. W. 1968. Starter protein levels for pigs. II. Effect on body composition. (Abs.) J. Anim. Sci. 27:1782.
- Yanga, M. D. 1968. Reproductive life of boars as to the number of services, sperm count and volume in the tropics. Proc. 6th Internatl. Cong. Reprod. Artif. Insem. 22-26 July 1968, Paris. Natl. Recherche Agron., France. p. 54. (ABA 37:758).
- Yoshimoto, T., Mimura, K., and Tamura, T. 1968. Study on the influences of hexestrol dicaprylate on fattening male pigs and bull calves. Eng. Sum. (Jap.) Hiroshima U. Fac. Fish. Anim. Husb. J. 7(2):313-325.
- Young, B. A., Care, A. D., and Duncan, T. 1968. Some observations on the light cells of the thyroid gland of the pig in relation to thyrocalcitonin production. J. Anat. 102(2):275-288.
- Young, L. G., Ashton, G. C., Forshaw, R. P., and Ingram, R. H. 1968. Relationship of dietary protein levels to performance and carcass merit of market swine. Canad. J. Anim. Sci. 48(1):71-81.
- Young, R. 1968. Field experience with artificial insemination of swine. Proc. 11th Natl. Pork Indus. Conf. Dec. 12-13, 1968. Raleigh, N. C.
- Zimmerman, D. R. 1968. Reproductive performance of gilts synchronized with aimax and fed two levels of energy. (Abs.) J. Anim. Sci. 27:1199-1200.
- Zinn, G. M., Weinman, D. E., and Tumbleson, M. E. 1968. Hyperthermic stress effects in swine. (Abs.) J. Anim. Sci. 27:1782-1783.
- Zobrisky, S. E., Hedrick, H. B., and Alexander, M. A. 1968. Indices of pork carcass composition. (Abs.) J. Anim. Sci. 27:1122.











